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CALIFORNIA REGIONAL WATER  
QUALITY CONTROL BOARD  
LOS ANGELES REGION

28 April 2000

Ms. Ana Townsend  
Site Cleanup Unit  
California Regional Water Quality Control Board  
Los Angeles Region  
320 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Subject: Quarterly Progress Report for January through March 2000  
For the Jervis B. Webb Company of California Property,  
5030 Firestone Boulevard, South Gate, California  
(RWQCB SLIC File No. 744; EKI 991103.01)

Dear Ms. Townsend:

On behalf of Jervis B. Webb Company of California ("Webb"), Erler & Kalinowski, Inc. is pleased to submit the enclosed *Quarterly Progress Report for January through March 2000*, dated 27 April 2000. This report describes the activities completed at the Webb property located at 5030 Firestone Boulevard in South Gate during the period from January through March 2000.

Please contact us if you have any comments or questions.

Very truly yours,

ERLER & KALINOWSKI, INC.



Steven R. Chambers, Ph.D.  
Project Manager

cc: Mr. Michael Farley, Esq., Jervis B. Webb Company

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## **Quarterly Progress Report for January through March 2000**

Jervis B. Webb Company of California  
5030 Firestone Boulevard  
South Gate, California

27 April 2000

**Erler &  
Kalinowski, Inc.**

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**Quarterly Progress Report for January through March 2000**  
**Jervis B. Webb Company of California**  
**5030 Firestone Boulevard, South Gate, California**

**Table of Contents**

<b>1. INTRODUCTION.....</b>	<b>1-1</b>
<b>2. QUARTERLY GROUNDWATER MONITORING.....</b>	<b>2-1</b>
<b>2.1. Measurements of Groundwater Elevation .....</b>	<b>2-1</b>
<b>2.2. Groundwater Sampling .....</b>	<b>2-1</b>
2.2.1. Groundwater Sampling Procedures .....	2-1
2.2.2. Analytical Results for Groundwater Samples.....	2-2
2.2.3. Quality Assurance/Quality Control.....	2-2
<b>3. SOIL REMEDIATION .....</b>	<b>3-1</b>
<b>3.1. Soil Vapor Extraction System Installation Activities.....</b>	<b>3-1</b>
3.1.1. Vapor Well Installation.....	3-1
3.1.2. Soil Vapor Extraction System Installation.....	3-1
<b>3.2. SVE System Operation and Monitoring .....</b>	<b>3-2</b>
<b>3.3. Soil Vapor Sampling .....</b>	<b>3-3</b>
3.3.1. Vapor Well and System Influent Sampling .....	3-3
3.3.2. Estimated VOC Removal Rates.....	3-4
3.3.3. Monitoring Well Field Sampling.....	3-4
3.3.4. SCAQMD Compliance Sampling.....	3-5
<b>3.4. SVE Influence Testing.....</b>	<b>3-5</b>
3.4.1. Flow Rate Profile Testing .....	3-5
3.4.2. Radius of Influence Testing .....	3-5
<b>4. PLANNED ACTIVITIES FOR NEXT QUARTER.....</b>	<b>4-1</b>

**Quarterly Progress Report for January through March 2000**

**Jervis B. Webb Company of California**  
**5030 Firestone Boulevard, South Gate, California**

**Table of Contents**

**5. SUMMARY ..... 5-1**

**6. REFERENCES AND PREVIOUS REPORTS ..... 6-1**

**LIST OF TABLES**

1	Groundwater Elevations in Monitoring Wells
2	Analytical Results for Groundwater Samples
3a	Soil Vapor Extraction Data: Total Influent
3b	Soil Vapor Extraction Data: SVE-1
3c	Soil Vapor Extraction Data: SVE-2
3d	Soil Vapor Extraction Data: SVE-3
3e	Soil Vapor Extraction Data: SVE-D1
4	Soil Vapor Monitoring Point Data
5	Soil Vapor Laboratory Analytical Data
6a	Flow Rate Profile and Radius of Influence Data: SVE-1
6b	Flow Rate Profile and Radius of Influence Data: SVE-D1

**LIST OF FIGURES**

1	Site Location Map
2	Groundwater Monitoring Well Locations
3	Elevation of the Groundwater Table on 27 January 2000
4	Elevation of the Groundwater Table on 28 February 2000
5	Elevation of the Groundwater Table on 15 March 2000
6	Layout of the Soil Vapor Extraction System
7	Soil Vapor Extraction System Schematic
8a	Flow Rate Profile: Well SVE-1
8b	Flow Rate Profile: Well SVE-D1

**LIST OF APPENDICES**

A	Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling
B	Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling
C	Laboratory Reports and Chain-of-Custody Forms for Soil Vapor Sampling

## **1. INTRODUCTION**

Erler & Kalinowski, Inc. ("EKI") is pleased to present this *Quarterly Progress Report for January through March 2000* for the property located at 5030 Firestone Boulevard and 9301 Rayo Avenue in South Gate, California Avenue (collectively referred to as the "Site," see Figure 1). The principal objectives of the activities performed during this quarter were to (1) monitor the groundwater wells at the Site and (2) commence operation of a soil vapor extraction system at the Site. The work documented in this report was performed on behalf of the Jervis B. Webb Company of California ("Webb"). The property at 5030 Firestone Boulevard is owned by Webb ("Webb Property") and the adjacent property at 9301 Rayo Avenue is owned by Reliable Steel Building Products, Inc. ("Reliable Steel").

The quarterly groundwater monitoring activities described herein were performed in accordance with EKI's *Project Tasks, Schedule, and Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property* ("Sampling Plan"), dated 29 September 1998.

## **2. QUARTERLY GROUNDWATER MONITORING**

### **2.1. Measurements of Groundwater Elevation**

The depth to groundwater in monitoring wells MW-1 through MW-5 was measured on 27 January, 28 February, and 15 March 2000 (see Figure 2 for well locations). These data are provided in Table 1. The depth to the groundwater table beneath the Site is approximately 44 feet below ground surface ("ft bgs"). Contours representing the elevation of the groundwater table on 27 January, 28 February, and 15 March 2000 are shown on Figures 3, 4, and 5, respectively. As inferred from the contours shown on these figures, the primary direction of groundwater flow in the groundwater table aquifer beneath the Site appears to be toward the southeast.

### **2.2. Groundwater Sampling**

#### 2.2.1. Groundwater Sampling Procedures

Prior to sampling of groundwater, each well was purged of a minimum of three well-casing volumes of groundwater using a submersible, electric pump. Groundwater purging was performed by West Hazmat and groundwater samples were collected by EKI. All down-hole equipment was thoroughly steam cleaned before use at each well.

During purging of the monitoring wells on 15 March 2000, the temperature, pH, conductivity, and turbidity of the purged groundwater were recorded by EKI. The instruments used for monitoring the purged groundwater were calibrated prior to commencement of groundwater purging. For each purge sample, the time, water quality parameters, and volume of purged groundwater were recorded on forms in the field (see Appendix A). Purging at each well continued until the variability of the monitored groundwater quality parameters stabilized to within approximately ten percent. Groundwater quality parameters were generally stable after purging three casing volumes of water from each well. The final turbidity of the purged groundwater was generally low, i.e., between 1.29 and 4.96 nephelometric turbidity units (see Appendix A).

Groundwater samples were collected from each monitoring well using disposable polyethylene bailers. A new bailer was used to sample each well. A sample label that included a unique sample identification number, the time, and the date when the sample was collected was attached to each sample container. Sample containers were sealed in zip-lock plastic bags and placed in a cooler with ice for temporary storage and transport to the analytical laboratory. Chain-of-Custody forms were initiated in the field and included with the samples. Laboratory reports and Chain-of-Custody forms for groundwater samples are attached in Appendix B.

### 2.2.2. Analytical Results for Groundwater Samples

Samples of groundwater were collected from monitoring wells MW-1 through MW-5 on 15 March 2000. In addition, a duplicate sample of groundwater was collected from well MW-5 on 15 March 2000. All samples of groundwater were submitted to Orange Coast Analytical, Inc., in Tustin, California, for analyses of volatile organic compounds ("VOCs") using United States Environmental Protection Agency ("EPA") Method 8260B. The analytical results for groundwater samples collected during this monitoring event are summarized in Table 2.

Trichloroethene ("TCE"), tetrachloroethene ("PCE"), cis- and trans- 1,2-dichloroethene ("c-1,2-DCE" and "t-1,2-DCE"), 1,1-dichloroethene ("1,1-DCE"), 1,1-dichloroethane ("1,1-DCA"), and benzene were detected in the samples of groundwater collected from monitoring wells MW-1 through MW-5 on 15 March 2000. The analytical results for the samples of groundwater collected during this monitoring event were similar to the results of previous groundwater monitoring at the Site, with the following exception:

- Benzene was detected in the sample of groundwater collected from monitoring well MW-4 at a concentration of 77 micrograms per liter ("ug/l"). This is the second consecutive monitoring event in which benzene has been detected in groundwater collected from well MW-4. Benzene has not been detected in samples of groundwater collected from other monitoring wells at the Site (see Table 2).

### 2.2.3. Quality Assurance/Quality Control

Standard laboratory QA/QC procedures used for the project included analyses of matrix spikes, matrix spike duplicates, a quality control check spike sample, and a method blank. The percent recoveries of the matrix spike, matrix spike duplicate, and the quality control check spike sample were within acceptable ranges. No analytes were detected in the method blank samples analyzed for this project. QA/QC results are provided with the laboratory reports in Appendix B.

In addition, a duplicate groundwater sample was collected from monitoring well MW-5 (see Table 2). Two analytes were detected in both of the samples of groundwater collected from well MW-5. The relative percentage differences ("RPDs") for c-1,2-DCE and TCE were 2.2 and 5.3 percent, respectively. These RPDs indicate an acceptable range of sampling and analytical reproducibility.

### **3. SOIL REMEDIATION**

#### **3.1. Soil Vapor Extraction System Installation Activities**

##### 3.1.1. Vapor Well Installation

Four soil vapor extraction wells and four soil vapor monitoring probes were installed at the Site during June 1999 (see Figure 6). The wells and probes were designed to allow for vapor extraction and monitoring in both the shallow and deep vadose zones at the Site. All of the wells were constructed using Schedule 40 PVC casing and screen. Refer to EKI (14 April 1999) and EKI (13 October 1999) for more detailed discussions of well construction information and subsurface conditions at the Site.

Vapor Extraction Wells: The three shallow vapor extraction wells, SVE-1, SVE-2, and SVE-3, are two-inch diameter wells. SVE-1 and SVE-3 are installed to a depth of approximately 25 ft bgs with slotted screen from approximately 19 to 25 feet bgs. SVE-2 is installed to a depth of approximately 24 ft bgs with slotted screen from approximately 18 to 24 feet bgs. Vapor extraction well SVE-D1 is a four-inch diameter well installed to a depth of approximately 44 feet bgs with slotted screen from approximately 30 to 40 feet bgs.

Vapor Monitoring Probes: The shallow vapor monitoring probes, VMP-1 and VMP-2, are two-inch diameter wells installed to a depth of approximately 25 feet bgs with slotted screen between from approximately 19 to 25 feet bgs. The deep vapor monitoring probes, VMP-D1 and VMP-D2, are constructed in the same boreholes with vapor monitoring wells SVE-2 and SVE-3, respectively, and are constructed with 2-inch diameter PVC. VMP-D1 is installed to a depth of approximately 43 feet bgs with slotted screen from approximately 30 to 40 feet bgs. VMP-D2 is installed to a depth of approximately 44 feet bgs with slotted screen from approximately 31 to 41 feet bgs.

##### 3.1.2. Soil Vapor Extraction System Installation

During the first quarter of 1999, Webb contracted with Drewelow Engineering of Cardiff, California ("Drewelow"), to install and operate a soil vapor extraction ("SVE") system at the Webb Property as described in the *Work Plan for Clarifier and Removal and Soil Remediation by Soil Vapor Extraction*, by EKI, dated 14 April 1999 ("Work Plan"). The RWQCB approved the Work Plan, with two modifications, in a letter dated 18 May 1999. Drewelow maintains a current South Coast Air Quality Management District ("SCAQMD") Various Locations Permit for granular activated carbon ("GAC") treatment of extracted soil vapors. Installation of the SVE system was completed at the Site during March 2000 (see Figure 6).

Soil vapors from the four extraction wells are passed through a condensate knock-out vessel and through a 200 cubic feet per minute ("cfm") blower (see Figure 7). The soil vapors are then passed through a heat exchanger and two 1,000-pound GAC vessels in series, with the treated vapors exhausted to the atmosphere. An ambient air dilution valve located ahead of the knockout vessel allows regulation of air extracted from the wells. All piping is routed above ground. Standard PVC pipe and fittings were used throughout the system. Electrical power to the system is metered, and the system is enclosed in a fenced area.

Vacuum gauges, a hand-held flow meter, and sampling ports are used to monitor each of the vapor extraction wells. Vacuum is measured in inches of water column ("in-wc"), vapor flow rate is measured in actual cubic feet per minute ("acfm"), and concentrations of VOCs are measured in parts per million by volume. Sampling ports were installed at each of the vapor wells and probes, and several locations in the SVE system for monitoring of VOC concentrations.

### **3.2. SVE System Operation and Monitoring**

The SVE system began operating on 16 March 2000. The system experienced a shutdown between system monitoring observations on 18 March and 19 March 2000. The cause of the shutdown was traced to the electrical system and the problem has been fixed. The system has been running continuously since 19 March 2000. Due to restrictions of the SCAQMD permit regarding the VOC concentration at the influent of the first GAC vessel, the system has been operated with ambient air diluting the influent concentrations. As a result, the vapor flow rates from the extraction wells have been lower than the flow rates anticipated in the Work Plan. As vapor concentrations decrease during the course of operation, less dilution will be required, thereby allowing for increased flow rates from the extraction wells.

The following parameters have been monitored during the initial operation of the SVE system: vapor flow rate from the extraction wells; total air flow rate; vacuum (pressure) at the extraction wells and monitoring points; blower influent flow rate and vacuum; blower discharge flow rate, pressure, and temperature; and VOC concentrations in the extracted soil vapor. The water level in the knockout tank is also monitored (no water has been observed as of 30 March 2000).

Monitoring data collected at the inlet to the system blower are presented in Table 3a. Monitoring data collected at individual soil vapor extraction wells are presented in Tables 3b through 3e. Field monitoring data for the soil vapor monitoring probes are presented in Table 4.

### **3.3. Soil Vapor Sampling**

#### **3.3.1. Vapor Well and System Influent Sampling**

EKI collected soil vapor samples from each of the vapor wells and probes on 16 March 2000, prior to startup of the SVE system. A duplicate soil vapor sample was collected from well SVE-2. A vapor sample was collected from the undiluted blower influent (i.e., the combined total influent of the four vapor extraction wells) after startup of the SVE system on 16 March 2000. Additional vapor samples were collected from the blower influent and extraction wells SVE-1 and SVE-D1 on 22 March 2000. The samples were collected in five-liter Tedlar sampling bags using a purge/sampling pump connected to a sampling port with Teflon tubing. All samples were labeled with a unique sample identification number, and chain-of-custody forms were initiated at the time of sampling. All samples were analyzed for VOCs by Performance Analytical, Inc., of Simi Valley, California, using EPA Method TO-14A. Analytical results for the samples are summarized in Table 5, and laboratory data sheets are attached in Appendix C.

**Shallow Vadose Zone:** The only VOCs detected at concentrations above method detection limits in the soil vapor samples collected from the five shallow-zone wells on 16 March 2000 were TCE, PCE, 1,1-DCE, 1,1,1-trichloroethane ("1,1,1-TCA"), and toluene (see Table 5). TCE and PCE were detected in each of the pre-startup samples collected from the shallow zone at concentrations ranging from 29 to 10,000 ppmv, and 1.0 to 230 ppmv, respectively, with maximum concentrations detected in samples collected from well SVE-1. Toluene was detected in two of the five vapor wells at a maximum concentration of 170 ppmv in well SVE-1. 1,1-DCE was detected in three of the five vapor wells at a maximum concentration of 0.8 ppmv in well SVE-2. 1,1,1-TCA was detected in well SVE-1 only, at a concentration of 53 ppmv.

An additional soil vapor sample was collected from well SVE-1 on 22 March 2000. TCE, PCE, 1,1,1-TCA, and toluene were detected at concentrations of 10,000, 140, 43, and 42 ppmv, respectively. No other VOCs were detected.

**Deep Vadose Zone:** The only VOCs detected at concentrations above method detection limits in the soil vapor samples collected from the three deep-zone wells on 16 March 2000 were TCE, PCE, 1,1-DCE, and toluene (see Table 5). 1,1,1-TCA was not detected in any of the deep vadose zone vapor samples. TCE and PCE were detected in each of the pre-startup samples collected in the deep vadose zone at concentrations ranging from 39 to 1,000 ppmv, and 0.75 to 16 ppmv, respectively, with maximum detections in the sample collected from SVE-D1. Toluene and 1,1-DCE were detected in the two monitoring probes (VMP-1 and VMP-D2) with maximum detections of 11 ppmv and 5.8 ppmv, respectively, in the sample collected from VMP-D1.

An additional soil vapor sample was collected from well SVE-D1 on 22 March 2000. TCE, 1,1-DCE, PCE, and toluene were detected at concentrations of 440, 11, 6.4, and 3.2 ppmv, respectively. No other VOCs were detected.

SVE Blower Influent: TCE, toluene, PCE, and 1,1-DCE were detected in the soil vapor sample collected from the SVE system total influent on 16 March 2000 at concentrations of 860, 49, 19, and 8.2 ppmv, respectively. No other chemicals were detected. EKI collected an additional soil vapor sample from the SVE system total influent on 22 March 2000. TCE, PCE, toluene, and 1,1,1-TCA were detected at concentrations of 490, 11, 3.9, and 3.0 ppmv, respectively. No other chemicals were detected.

### 3.3.2. Estimated VOC Removal Rates

VOC removal rates were calculated using measured vacuum readings, flow rates, and analytical data (see Tables 3a through 3e). Laboratory data were used to calculate VOC removal rates on days when samples were collected for laboratory analyses. For the end of the quarter on 30 March 2000, no samples were collected for laboratory analysis. Therefore, ratios of photo-ionization detector ("PID") readings were multiplied by earlier calculated removal rates to estimate mass removal rates on 30 March 2000.

Based on measurements made at the blower influent, an estimated 26 pounds of VOCs, including 24 pounds of TCE, have been extracted from soil at the site as of 30 March 2000 (see Table 3a). Based on measurements made at individual extraction wells, an estimated 32 pounds of VOCs, including 31 pounds of TCE have been extracted from the shallow soil zone as of 30 March 2000 (see Tables 3b, 3c, and 3d), and an estimated 28 pounds of VOCs, including 27 pounds of TCE have been extracted from the deep soil zone as of 30 March 2000 (see Table 3e).

The sum of the mass removal calculated for each of the extraction wells is higher than the estimated mass removal for the system as a whole, as measured at the blower influent. This anomaly is caused in part by low precision in measuring the relatively low flow rates in the shallow extraction wells, as magnified by the high TCE concentration measured in well SVE-1. The measurements made at the blower influent are considered to be the more reliable measurements of total VOC mass removal.

### 3.3.3. Monitoring Well Field Sampling

Total VOC concentrations in soil vapor samples were also occasionally monitored with an organic vapor meter, which utilizes a PID to measure total concentrations of VOCs. The PID does not distinguish between individual compounds, but gives a reading for total VOCs. Samples for PID analyses were collected in a Tedlar bag using the method described in Section 3.3.1. The PID was calibrated with 100 ppmv of isobutylene.

PID readings from samples collected at the extraction wells and vapor monitoring probes are presented in Tables 3a through 3e and in Table 4. PID readings suggest that total VOC concentrations in extraction well SVE-1 increased during the first few days of operation, and then decreased slightly. However, laboratory data suggest that concentrations decreased or were stable throughout the observed period of operation (see Table 3b). PID readings suggest that total VOC concentrations in extraction wells SVE-2, SVE-3, and SVE-D1 have

decreased during the course of operation. Further sampling is planned to confirm these trends.

#### 3.3.4. SCAQMD Compliance Sampling

The effluent of the treatment system was sampled with a PID on a daily basis during the first week of operation, and weekly thereafter. For treatment system monitoring, the PID is calibrated with 50 ppmv of hexane. Drewelow collected samples for PID analysis to measure total VOC concentrations from the effluent of the SVE treatment system in accordance with the conditions of Drewelow's SCAQMD Various Locations Permit. Two samples were also collected from the SVE system for analyses by Performance using EPA Method TO-14A. The vapor sample collected from the influent to the first carbon vessel contained 18 ppmv of TCE, 1.4 ppmv of toluene, 0.46 ppmv of PCE, and 0.19 ppmv of 1,1-DCE. The vapor sample collected from the effluent of the second carbon vessel contained 0.0039 ppmv of acetone and 0.00094 ppmv of toluene. No other VOCs were detected. Effluent concentrations measured by the laboratory and by the PID have been within the discharge limitations of the SCAQMD permit.

### **3.4. SVE Influence Testing**

#### 3.4.1. Flow Rate Profile Testing

To help determine appropriate operational settings, flow rate profile tests were performed at vapor extraction wells SVE-1 and SVE-D1 on 16 March 2000. The results of the tests are listed in Tables 6a and 6b. The tests were conducted by closing all extraction wells, except the well to be tested. The dilution valve was fully opened and the system was started. The dilution valve was then closed until a pre-determined vacuum was achieved. The flow rate of the extraction well and the vacuum at each monitoring well were measured periodically as the system equilibrated. This process was repeated at two to three vacuum settings at both SVE-1 and SVE-D1 in order to determine the amount of air flow achievable through each vapor extraction well at different operating conditions. The measured flow rates at the different operating conditions are plotted on Figures 8a and 8b.

#### 3.4.2. Radius of Influence Testing

Radius of influence tests were conducted at vapor extraction wells SVE-1 and SVE-D1 on 16 March 2000 (see Tables 6a and 6b). The tests were conducted by recording the vacuum at the soil vapor monitoring probes while varying the vacuum at the extraction well. The data show that the induced monitoring probe vacuums increased as the applied extraction well vacuum was increased, demonstrating that the vacuum measured at the monitoring wells resulted from the vacuum applied at the extraction well.

Soil vapor extraction at shallow well SVE-1 caused measurable induced vacuum at both VMP-1 and VMP-2, indicating that the radius of influence of vapor extraction well SVE-1 in the shallow soil zone extends beyond VMP-2, which is located 20 feet from SVE-1.

Soil vapor extraction at deep well SVE-D1 caused measurable induced vacuum at both VMP-D1 and VMP-D2, indicating that the radius of influence of vapor extraction well SVE-D1 in the deep soil zone extends beyond VMP-D1 and VMP-D2, which are located approximately 30 feet and 40 feet from SVE-D1, respectively. Extraction from deep well SVE-D1 also resulted in a measurable vacuum in shallow well SVE-2.

For both SVE-1 and SVE-D1, the measured radius of influence extended at least as far as was anticipated in the Work Plan.

#### **4. PLANNED ACTIVITIES FOR NEXT QUARTER**

During the next quarter, it is anticipated that the groundwater elevations at the site will continue to be measured on a monthly basis. We also plan to collect samples from each of the groundwater monitoring wells at the Site during the last month of the quarter. These samples will be analyzed for VOCs by EPA Method 8260B.

It is anticipated that the SVE system will continue operating throughout the next quarter. We plan to collect flow, vacuum, and PID readings from the extraction wells on a weekly basis throughout the quarter. It is anticipated that vapor samples will be collected from the extraction wells on a monthly basis for laboratory analysis by EPA Method TO-14A. We plan to collect vacuum and PID readings from the monitoring probes on a monthly basis during the next quarter and it is anticipated that vapor samples will be collected from the monitoring probes once during the next quarter for laboratory analysis by EPA Method TO-14A. We also plan to conduct flow rate profile and radius of influence tests once during the next quarter.

## **5. SUMMARY**

Gauging of the depth to the groundwater table was performed at the groundwater monitoring wells at the Site on 27 January, 28 February, and 15 March 2000. The direction of groundwater flow appears to be predominantly toward the southeast under both the Webb and Reliable Steel properties. This estimated direction of groundwater flow is consistent with previous groundwater monitoring at the Site.

Quarterly sampling of groundwater was performed at the groundwater monitoring wells at the Site on 15 March 2000. Chemical analyses of groundwater samples collected during this monitoring event detected TCE, PCE, c-1,2-DCE, t-1,2-DCE, 1,1-DCE, 1,1-DCA, and benzene. The detected concentrations of TCE were higher than the concentrations of the other VOCs detected in each sample. The results of these analyses are generally consistent with prior sampling and analysis of groundwater collected at the Site, except for a detection of benzene at a concentration of 77 ug/l in the sample collected from well MW-4. The highest concentration of TCE was detected in the sample of groundwater collected from well MW-1 (30,000 ug/l) near the building on the Webb property.

A soil vapor extraction system began operation at the Site in March 2000 and operated for the last two weeks of the quarter. Soil vapor samples were collected for laboratory analysis at each of the eight extraction wells and monitoring probes prior to start-up of the system. A sample of influent to the SVE system blower was collected immediately after startup and three additional samples were collected for laboratory analysis one week after startup of the system. Chemical analyses of vapor samples collected during vapor sampling at the site detected TCE, PCE, toluene, 1,1,1-TCA, and 1,1-DCE. The detected concentrations of TCE were higher than the concentrations of the other VOCs detected in each sample. The highest concentration of TCE was 10,000 ppmv, detected in the soil vapor sample collected from extraction well SVE-1, which is located in the footprint in the location of the former clarifier on the Webb property.

Based upon the flow rate profile and radius of influence testing, the soil vapor flow rates from the extraction wells are not as high as anticipated, but the radius of influence appears to be adequate for VOC removal in the area of the former clarifier. An estimated 26 pounds of VOCs, including 24 pounds of TCE, have been extracted from the soil as of 30 March 2000.

## **6. REFERENCES AND PREVIOUS REPORTS**

Erler & Kalinowski, Inc., 20 June 1996. *Phase I Environmental Site Assessment of the Jervis B. Webb Properties at 9301 Rayo Avenue and 5030 Firestone Boulevard in South Gate, California.*

Erler & Kalinowski, Inc., 18 February 1998. *Phase II Soil Investigation Report for the Jervis B. Webb Company Property at 5030 Firestone Boulevard in South Gate, California.*

Erler & Kalinowski, Inc., 30 June 1998. *Phase II Groundwater Investigation Report at 5030 Firestone Boulevard in South Gate, California.*

Erler & Kalinowski, Inc., 29 September 1998. *Project Tasks, Schedule, and Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property.*

Erler & Kalinowski, Inc., 21 October 1998. *Transmittal of Results for Additional Groundwater Investigation and Proposed Well Installation at 5030 Firestone Boulevard, South Gate, California.*

Erler & Kalinowski, Inc., 13 January 1999. *Additional Groundwater Investigation and Quarterly Monitoring Report for October to December 1998, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.*

Erler & Kalinowski, Inc., 14 April 1999. *Work Plan for Clarifier and Removal and Soil Remediation by Soil Vapor Extraction at the Jervis B. Webb Company Property Located at 5030 Firestone Boulevard, South Gate, California.*

Erler & Kalinowski, Inc., 4 June 1999. *Quarterly Progress Report for January to March 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.*

Erler & Kalinowski, Inc., 30 July 1999. *Quarterly Progress Report for April to June 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.*

Erler & Kalinowski, Inc., 13 October 1999. *Quarterly Progress Report for July to August 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.*

Erler & Kalinowski, Inc., 4 February 2000. *Quarterly Progress Report for September to December 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.*

**TABLES**

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-1	2/27/98	106.09	44.79	61.30	
	3/2/98	106.09	44.82	61.27	
	3/4/98	106.09	44.58	61.51	
	4/8/98	106.09	44.57	61.52	
	5/20/98	106.09	43.99	62.10	
	10/8/98	106.09	43.38	62.71	
	11/5/98	106.09	43.14	62.95	
	12/21/98	106.09	43.37	62.72	
	1/19/99	106.09	43.26	62.83	
	2/3/99	106.09	42.98	63.11	
	3/30/99	106.09	43.22	62.87	
	6/1/99	106.09	43.48	62.61	
	7/29/99	106.09	43.82	62.27	
	9/1/99	106.09	43.76	62.33	
	9/23/99	106.09	44.03	62.06	
	10/18/99	106.09	44.43	61.66	
	12/8/99	106.09	44.55	61.54	
	1/27/00	106.09	44.40	61.69	
	2/28/00	106.09	44.34	61.75	
	3/15/00	106.09	44.06	62.03	
MW-2	2/27/98	106.65	44.02	62.63	Truck parked on well.
	3/2/98	106.65	44.06	62.59	
	3/4/98	106.65	44.13	62.52	
	4/8/98	106.65	NR	--	
	5/20/98	106.65	43.51	63.14	
	10/8/98	106.65	42.84	63.81	
	11/5/98	106.65	42.64	64.01	
	12/21/98	106.65	42.69	63.96	
	1/19/99	106.65	42.66	63.99	
	2/3/99	106.65	42.55	64.10	
	3/30/99	106.65	42.63	64.02	
	6/1/99	106.65	42.91	63.74	
	7/29/99	106.65	43.13	63.52	
	9/1/99	106.65	43.14	63.51	
	9/23/99	106.65	43.35	63.30	
	10/18/99	106.65	43.60	63.05	
	12/8/99	106.65	43.62	63.03	
	1/27/00	106.65	43.86	62.79	
	2/28/00	106.65	43.86	62.79	
	3/15/00	106.65	43.62	63.03	

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-3	2/27/98	105.87	44.55	61.32	
	3/2/98	105.87	44.56	61.31	
	3/4/98	105.87	44.40	61.47	
	4/8/98	105.87	44.39	61.48	
	5/20/98	105.87	43.80	62.07	
	10/8/98	105.87	43.26	62.61	
	11/5/98	105.87	43.60	62.27	
	12/21/98	105.87	43.33	62.54	
	1/19/99	105.87	43.18	62.69	
	2/3/99	105.87	42.97	62.90	
	3/30/99	105.87	43.19	62.68	
	6/1/99	105.87	43.58	62.29	
	7/29/99	105.87	43.85	62.02	
	9/1/99	105.87	43.90	61.97	
	9/23/99	105.87	44.10	61.77	
	10/18/99	105.87	44.37	61.50	
	12/8/99	105.87	44.64	61.23	
	1/27/00	105.87	44.69	61.18	
	2/28/00	105.87	44.75	61.12	
	3/15/00	105.87	44.41	61.46	
MW-4	11/3/98	104.72	42.77	61.95	Well Developed
	11/5/98	104.72	42.64	62.08	
	12/21/98	104.72	42.93	61.79	
	1/19/99	104.72	42.80	61.92	
	2/3/99	104.72	42.63	62.09	
	3/30/99	104.72	42.89	61.83	
	6/1/99	104.72	43.28	61.44	
	7/29/99	104.72	43.63	61.09	
	9/1/99	104.72	43.70	61.02	
	9/23/99	104.72	43.96	60.76	
	10/18/99	104.72	44.22	60.50	
	12/8/99	104.72	44.48	60.24	
	1/27/00	104.72	44.70	60.02	
	2/28/00	104.72	NR	--	Truck parked on well.
	3/15/00	104.72	44.37	60.35	

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-5	11/3/98	106.13	43.32	62.81	Well Developed
	11/5/98	106.13	43.30	62.83	
	12/21/98	106.13	43.58	62.55	
	1/19/99	106.13	43.46	62.67	
	2/3/99	106.13	43.20	62.93	
	3/30/99	106.13	43.49	62.64	
	6/1/99	106.13	43.88	62.25	
	7/29/99	106.13	44.19	61.94	
	9/1/99	106.13	44.22	61.91	
	9/23/99	106.13	44.48	61.65	
	10/18/99	106.13	44.72	61.41	
	12/8/99	106.13	44.98	61.15	
	1/27/00	106.13	45.17	60.96	
	2/28/00	106.13	45.15	60.98	
	3/15/00	106.13	44.87	61.26	

**NOTES:**

ft msl = feet above mean sea level  
ft bgs = feet beneath ground surface  
NR = Not Recorded  
-- Not Applicable

1. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 6 March 1998 by Rattray & Associates, Inc.
2. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 21 December 1998 by Rattray & Associates, Inc.

## TABLE 2

### *Analytical Results for Groundwater Samples*

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration									
			Benzene (ug/L)	Toluene (ug/L)	1,1-DCA (ug/L)	1,1-DCE (ug/L)	1,2-DCA (ug/L)	c-1,2-DCE (ug/L)	t-1,2-DCE (ug/L)	PCE (ug/L)	TCE (ug/L)	TDS (mg/L)
MW-1	MW-1-0304	3/4/98	<100	<100	<100	220	<100	130	<100	140	24,000	--
	MW-1-0304DUP	3/4/98	<100	<100	<100	210	<100	150	<100	160	25,000	--
	MW-1-0520	5/20/98	<125	<125	<125	160	<125	130	<125	<125	24,000	1,500
	MW-1	11/5/98	<125	<125	<125	140	<125	160	<125	170	28,000	--
	MW-1	2/3/99	<125	<125	<125	130	<125	160	<125	160	27,000	--
	MW-1	6/1/99	<100	<100	<100	140	<100	190	<100	160	28,000	--
	MW-1	9/1/99	<100	<100	140	220	<100	200	<100	190	32,000	--
	MW-1	12/8/99	<250	<250	<250	<250	<250	<250	<250	<250	30,000	--
	MW-1-A <sup>(3)</sup>	12/8/99	<100	<100	110	150	<100	200	<100	160	33,000	--
	MW-1	3/15/00	<100	<100	<100	160	<100	230	<250	150	30,000	--
MW-2	MW-2-0304	3/4/98	<10	<10	13	34	<10	65	<10	<10	2,700	--
	MW-2-0520	5/20/98	<10	<10	14	38	<10	68	<10	<10	3,000	2,500
	MW-2	11/5/98	<10	<10	13	36	<10	68	<10	<10	3,200	--
	MW-2	2/3/99	<10	<10	13	36	<10	70	<10	<10	3,200	--
	MW-2	6/1/99	<10	<10	12	34	<10	68	<10	<10	2,800	--
	MW-2	9/1/99	<10	<10	16	49	<10	72	<10	<10	3,100	--
	MW-2	12/8/99	<13	<13	<13	<13	<13	57	<13	<13	2,400	--
	MW-2-A <sup>(3)</sup>	12/8/99	<10	<10	12	22	<10	63	<10	<10	2,600	--
	MW-2	3/15/00	<10	<10	<10	<10	<10	74	<13	<13	2,800	--
MW-3	MW-3-0304	3/4/98	<10	13	14	82	<10	200	<10	<10	2,800	--
	MW-3-0520	5/20/98	<10	<10	13	58	<10	230	15	<10	2,800	1,100
	MW-3	11/5/98	<10	<10	11	66	<10	240	18	<10	2,300	--
	MW-3	2/3/99	<10	<10	11	64	<10	220	18	<10	2,000	--
	MW-3	6/1/99	<10	<10	11	66	53	240	18	<10	1,900	--
	MW-3	9/1/99	<10	<10	13	80	<10	270	20	<10	2,600	--
	MW-3	12/8/99	<13	<13	<13	<13	<13	220	<13	<13	2,500	--
	MW-3-A <sup>(3)</sup>	12/8/99	<10	<10	13	55	<10	240	19	<10	2,900	--
	MW-3	3/15/00	<10	<10	11	61	<10	300	20	<10	3,100	--

**Erler & Kalinowski, Inc.**

4/27/00

## TABLE 2

### *Analytical Results for Groundwater Samples*

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration									
			Benzene (ug/L)	Toluene (ug/L)	1,1-DCA (ug/L)	1,1-DCE (ug/L)	1,2-DCA (ug/L)	c-1,2-DCE (ug/L)	t-1,2-DCE (ug/L)	PCE (ug/L)	TCE (ug/L)	TDS (mg/L)
MW-4	MW-4	11/5/98	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	6.7	--
	MW-4	2/3/99	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	--
	MW-4	6/1/99	<0.5	<0.5	<0.5	<0.5	65	1.1	<0.5	<0.5	0.90	--
	MW-4	9/1/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	MW-4	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.1	1.0	<0.5	17	--
	MW-4-A <sup>(3)</sup>	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.6	1.1	<0.5	18	--
	MW-4	3/15/00	77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.68	--
MW-5	MW-5	11/5/98	<25	<25	<25	42	<25	380	30	<25	5,000	--
	MW-5-DUP	11/5/98	<25	<25	<25	40	<25	360	29	<25	4,800	--
	MW-5	2/3/99	<25	<25	<25	49	<25	420	35	<25	5,100	--
	MW-5-DUP	2/3/99	<25	<25	<25	45	<25	370	31	<25	4,500	--
	MW-5	6/1/99	<25	<25	<25	52	35	420	36	<25	5,500	--
	MW-5-DUP	6/1/99	<25	<25	<25	56	39	430	35	<25	5,300	--
	MW-5	9/1/99	<25	<25	<25	40	<25	420	45	<25	5,500	--
	MW-5-DUP	9/1/99	<25	<25	<25	69	<25	440	45	<25	6,000	--
	MW-5	12/8/99	<50	<50	<50	<50	<50	390	<50	<50	5,100	--
	MW-5-A <sup>(3)</sup>	12/8/99	<25	<25	<25	<25	<25	410	25	<25	5,300	--
	MW-5-DUP	12/8/99	<50	<50	<50	<50	<50	360	<50	<50	5,000	--
	MW-5-DUP-A <sup>(3)</sup>	12/8/99	<25	<25	<25	<25	<25	410	26	<50	5,300	--
	MW-5	3/15/00	<50	<50	<50	<50	<50	440	<50	<50	5,500	--
	MW-5-DUP	3/15/00	<50	<50	<50	<50	<50	450	<50	<50	5,800	--

**NOTES:**

1,1-DCA = 1,1-dichloroethane  
 1,1-DCE = 1,1-dichloroethene  
 1,2-DCA = 1,2-dichloroethane  
 c-1,2-DCE = cis-1,2-dichloroethene  
 t-1,2-DCE = trans-1,2-dichloroethene

PCE = tetrachloroethene  
 TCE = trichloroethene  
 TDS = total dissolved solids  
 VOCs = volatile organic compounds

mg/l = milligrams per liter  
 ug/l = micrograms per liter  
 -- indicates not analyzed

- Analyses performed by Orange Coast Analytical, Inc., in Tustin, California, using EPA Method 8260 for VOCs and EPA Method 160.1 for TDS.
- < indicates that the analyte was not detected at a concentration above the indicated method detection limit.
- Samples collected on 8 December 1999 were initially analyzed on 9 December 1999 and were re-analyzed on 17 December 1999 in an attempt to achieve lower method detection limits.

# TABLE 3a

## Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Operation Time	Flow (acfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	Laboratory Analyses Analyte Concentration (ppmv)					Estimated VOC Removal Rates (lb/day)						Cumulative Mass Removal	
							1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	Total VOCs	Total VOCs (lbs)	TCE (lbs)
3/16/00	16:00	5.6	0%	4.5	35	2,000+	8.2 tr	19	<9.2	860	49	0.012	0.049	0	1.8	0.070	1.9	0	0
3/17/00	7:00	20.3	100%	5.2	37	90	-	-	-	-	-	-	-	-	-	-	-	-	-
3/18/00	6:30	44.7	100%	5.4	38	130	-	-	-	-	-	-	-	-	-	-	-	-	-
3/19/00	6:30	47.9	10%	6.1	38	100	-	-	-	-	-	-	-	-	-	-	-	-	-
3/20/00	6:30	72.2	100%	8.6	43	150	-	-	-	-	-	-	-	-	-	-	-	-	-
3/21/00	7:00	96.3	100%	4.8	60	750	-	-	-	-	-	-	-	-	-	-	-	-	-
3/22/00	7:30	120.5	100%	11	15	170	<5.0	11	3.0 tr	490	3.9 tr	0	0.071	0.015	2.5	0.014	2.6	11	10
3/30/00	11:00	316.0	100%	20	45	39	-	-	-	-	-	0	0.028	0.0061	1.0	0.0055	1.0	25	24

**NOTES:** 1,1-DCE = 1,1-dichloroethene  
PCE = tetrachloroethene  
1,1,1-TCA = 1,1,1-trichloroethane  
TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = temperature in degrees Fahrenheit

hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds  
PID = photoionization detector  
ppmv = parts per million by volume

tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to standard cubic feet per minute using the measured vacuum).
- Cumulative mass removal amounts are calculated using an average removal rate and elapsed system operation time.
- For the 30 March 2000 removal rates, the analyte concentration was estimated using the 22 March 2000 analytical data, multiplied by a ratio of PID readings. These rates will be recalculated during the next reporting period with more recent laboratory analytical data.

# TABLE 3b

## Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow (acfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	Laboratory Analyses Analyte Concentration (ppmv)					Estimated VOC Removal Rates (lb/day)						Cumulative Mass Removal	
						1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	Total VOCs	Total VOCs (lbs)	TCE (lbs)
3/16/00	16:00	5.6	0.04	35	870	<130	230	53 tr	10,000	170	0	0.0053	0.0010	0.18	0.0022	0.19	0	0
3/17/00	7:00	20.3	0.04	37	190	-	-	-	-	-	-	-	-	-	-	-	-	-
3/18/00	6:30	44.7	0.06	38	200	-	-	-	-	-	-	-	-	-	-	-	-	-
3/19/00	6:30	47.9	0.70	38	2,000+	-	-	-	-	-	-	-	-	-	-	-	-	-
3/20/00	6:30	72.2	0.63	43	2,000+	-	-	-	-	-	-	-	-	-	-	-	-	-
3/21/00	7:00	96.3	0.61	60	2,000+	-	-	-	-	-	-	-	-	-	-	-	-	-
3/22/00	7:30	120.5	0.58	15	2,000+	<50	140	43	10,000	42 tr	0	0.049	0.012	2.8	0.0082	2.9	7	7
3/30/00	11:00	316.0	0.78	45	1,800	-	-	-	-	-	0	0.055	0.014	3.1	0.0092	3.2	32	31

**NOTES:** 1,1-DCE = 1,1-dichloroethene  
PCE = tetrachloroethene  
1,1,1-TCA = 1,1,1-trichloroethane  
TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = temperature in degrees Fahrenheit

hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds  
PID = photoionization detector  
ppmv = parts per million by volume

tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to standard cubic feet per minute using the measured vacuum).
- Cumulative mass removal amounts are calculated using an average removal rate and elapsed system operation time.
- For the 30 March 2000 removal rates, the analyte concentration was estimated using the 22 March 2000 analytical data, multiplied by a ratio of PID readings. These rates will be recalculated during the next reporting period with more recent laboratory analytical data.
- Extraction well SVE-1 is screened in the shallow vadose zone at depths ranging from 19 to 25 feet below ground surface.

Erler & Kalinowski, Inc.

4/27/00

# TABLE 3c

## Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow (acfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	Laboratory Analyses Analyte Concentration (ppmv)					Estimated VOC Removal Rates (lb/day)						Cumulative Mass Removal	
						1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	Total VOCs	Total VOCs (lbs)	TCE (lbs)
3/16/00	16:00	5.6	0.61	35	230	0.72 tr	1.2	<0.73	75	<1.1	1.5E-04	4.2E-04	0	0.021	0	0.021	0	0
3/17/00	7:00	20.3	0.61	37	190	-	-	-	-	-	-	-	-	-	-	-	-	-
3/18/00	6:30	44.7	0.61	38	33	-	-	-	-	-	-	-	-	-	-	-	-	-
3/19/00	6:30	47.9	0.65	38	300	-	-	-	-	-	-	-	-	-	-	-	-	-
3/20/00	6:30	72.2	0.94	43	240	-	-	-	-	-	-	-	-	-	-	-	-	-
3/21/00	7:00	96.3	0.89	60	230	-	-	-	-	-	-	-	-	-	-	-	-	-
3/22/00	7:30	120.5	0.57	15	93	-	-	-	-	-	-	-	-	-	-	-	-	-
3/30/00	11:00	316.0	0.61	45	78	-	-	-	-	-	4.9E-05	1.4E-04	0	6.9E-03	0	0.0071	0.18	0.18

**NOTES:** 1,1-DCE = 1,1-dichloroethene  
PCE = tetrachloroethene  
1,1,1-TCA = 1,1,1-trichloroethane  
TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = temperature in degrees Fahrenheit

hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds  
PID = photoionization detector  
ppmv = parts per million by volume

tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to standard cubic feet per minute using the measured vacuum).
- Cumulative mass removal amounts are calculated using an average removal rate and elapsed system operation time.
- For the 30 March 2000 removal rates, the analyte concentration was estimated using the 22 March 2000 analytical data, multiplied by a ratio of PID readings. These rates will be recalculated during the next reporting period with more recent laboratory analytical data.
- Extraction well SVE-1 is screened in the shallow vadose zone at depths ranging from 19 to 25 feet below ground surface.

Erler & Kalinowski, Inc.

4/27/00

# TABLE 3d

## Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow (acfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	Laboratory Analyses Analyte Concentration (ppmv)					Estimated VOC Removal Rates (lb/day)						Cumulative Mass Removal	
						1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	Total VOCs	Total VOCs (lbs)	TCE (lbs)
3/16/00	16:00	5.6	0.41	35	31	0.56	3	<0.37	25	<0.53	7.7E-05	6.4E-04	0	0.0047	0	0.0054	0	0
3/17/00	7:00	20.3	0.98	37	6.1	-	-	-	-	-	-	-	-	-	-	-	-	-
3/18/00	6:30	44.7	0.98	38	8.3	-	-	-	-	-	-	-	-	-	-	-	-	-
3/19/00	6:30	47.9	0.98	38	45	-	-	-	-	-	-	-	-	-	-	-	-	-
3/20/00	6:30	72.2	0.98	43	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-
3/21/00	7:00	96.3	1.0	60	11	-	-	-	-	-	-	-	-	-	-	-	-	-
3/22/00	7:30	120.5	0.95	15	9.6	-	-	-	-	-	-	-	-	-	-	-	-	-
3/30/00	11:00	316.0	0.76	45	29	-	-	-	-	-	1.3E-04	0.0011	0	0.0078	0	0.0089	0.093	0.080

**NOTES:** 1,1-DCE = 1,1-dichloroethene  
PCE = tetrachloroethene  
1,1,1-TCA = 1,1,1-trichloroethane  
TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = temperature in degrees Fahrenheit

hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds  
PID = photoionization detector  
ppmv = parts per million by volume

tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to standard cubic feet per minute using the measured vacuum).
- Cumulative mass removal amounts are calculated using an average removal rate and elapsed system operation time.
- For the 30 March 2000 removal rates, the analyte concentration was estimated using the 22 March 2000 analytical data, multiplied by a ratio of PID readings. These rates will be recalculated during the next reporting period with more recent laboratory analytical data.
- Extraction well SVE-1 is screened in the shallow vadose zone at depths ranging from 19 to 25 feet below ground surface.

# TABLE 3e

## Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow (acfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	Laboratory Analyses Analyte Concentration (ppmv)					Estimated VOC Removal Rates (lb/day)						Cumulative Mass Removal	
						1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	1,1-DCE	PCE	1,1,1-TCA	TCE	Toluene	Total VOCs	Total VOCs (lbs)	TCE (lbs)
3/16/00	16:00	5.6	2.7	6	1,600	<25	16	<18	1,000	<27	0	0.027	0	1.3	0	1.4	0	0
3/17/00	7:00	20.3	4.6	10	92	-	-	-	-	-	-	-	-	-	-	-	-	-
3/18/00	6:30	44.7	5.3	10	130	-	-	-	-	-	-	-	-	-	-	-	-	-
3/19/00	6:30	47.9	5.5	6	30	-	-	-	-	-	-	-	-	-	-	-	-	-
3/20/00	6:30	72.2	5.8	9	160	-	-	-	-	-	-	-	-	-	-	-	-	-
3/21/00	7:00	96.3	2.6	7	560	-	-	-	-	-	-	-	-	-	-	-	-	-
3/22/00	7:30	120.5	8.9	15	70	11	6.4	<3.7	440	3.2 tr	0.035	0.035	0	1.9	0.0096	2.0	8	8
3/30/00	11:00	316.0	29	45	36	-	-	-	-	-	0.091	0.053	0	2.9	0.015	3.0	28	27

**NOTES:** 1,1-DCE = 1,1-dichloroethene  
PCE = tetrachloroethene  
1,1,1-TCA = 1,1,1-trichloroethane  
TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = temperature in degrees Fahrenheit

hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds  
PID = photoionization detector  
ppmv = parts per million by volume

tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to standard cubic feet per minute using the measured vacuum).
- Cumulative mass removal amounts are calculated using an average removal rate and elapsed system operation time.
- For the 30 March 2000 removal rates, the analyte concentration was estimated using the 22 March 2000 analytical data, multiplied by a ratio of PID readings. These rates will be recalculated during the next reporting period with more recent laboratory analytical data.
- Extraction well SVE-1 is screened in the shallow vadose zone at depths ranging from 19 to 25 feet below ground surface.

# TABLE 4

## *Data for Soil Vapor Monitoring Probes*

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	VMP-1		VMP-2		VMP-D1		VMP-D2	
	Vacuum (in-wc)	Total VOCs by PID <sup>(1,2)</sup> (ppmv)	Vacuum (in-wc)	Total VOCs by PID <sup>(1,2)</sup> (ppmv)	Vacuum (in-wc)	Total VOCs by PID <sup>(1,3)</sup> (ppmv)	Vacuum (in-wc)	Total VOCs by PID <sup>(1,3)</sup> (ppmv)
3/16/00	-	68	-	150	-	530	-	71
3/17/00	1.8	-	1.0	-	4.7	-	5.2	-
3/18/00	1.3	-	1.1	-	6.6	-	6.0	-
3/19/00	1.1	-	0.7	-	2.2	-	2.4	-
3/20/00	2.1	-	1.4	-	2.6	-	3.5	-
3/21/00	2.4	-	2.2	-	5.4	-	6.8	-
3/22/00	2.6	-	2.3	-	5.8	-	4.5	-
3/30/00	1.8	-	1.8	-	15	-	16	-

### NOTES:

in-wc = inches of water column

PID = photoionization detector

ppmv = parts per million by volume

VOCs = volatile organic compounds

- = no measurement

1. PID calibrated with 100 ppmv of isobutylene.
2. Each shallow vapor monitoring probe was purged of approximately 5 to 7 cubic feet of vapor and then sampled and analyzed using a PID.
3. Each deep vapor monitoring probe was purged of approximately 50 to 65 cubic feet of vapor and then sampled and analyzed using a PID.
4. Soil vapor monitoring probes VMP-1 and VMP-2 are screened in the shallow vadose zone at depths ranging from approximately 19 to 25 feet beneath the ground surface.
5. Soil vapor monitoring probes VMP-D1 and VMP-D2 are screened in the deep vadose zone at depths ranging from approximately 30 to 40 and 31 to 41 feet beneath the ground surface, respectively.

# TABLE 5

## Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	Analyte Concentration											
		Acetone		1,1-DCE		PCE		1,1,1-TCA		TCE		Toluene	
		(ppmv)	(ug/l)	(ppmv)	(ug/l)	(ppmv)	(ug/l)	(ppmv)	(ug/l)	(ppmv)	(ug/l)	(ppmv)	(ug/l)
Blower Influent	3/22/00	<8.4	<20	<5.0	<20	11	75	3.0 tr	16 tr	490	2,600	3.9 tr	15 tr
	3/16/00	<21	<50	8.2 tr	33 tr	19	130	<9.2	<50	860	4,600	49	180
SVE-1	3/22/00	<84	<200	<50	<200	140	930	43	230	10,000	54,000	42 tr	160 tr
	3/16/00	<210	<500	<130	<500	230	1,600	53 tr	290 tr	10,000	54,000	170	660
SVE-2	3/16/00	<1.7	<4.0	0.72 tr	2.8 tr	1.2	8.0	<0.73	<4.0	75	400	<1.1	<4.0
	DUP	<1.7	<4.0	0.80 tr	3.2 tr	1.5	10	<0.73	<4.0	96	520	1.3	4.8
SVE-3	3/16/00	<0.84	<2.0	0.56	2.2	3	18	<0.37	<2.0	25	130	<0.53	<2.0
SVE-D1	3/22/00	<8.4	<20	11	43	6.4	43	<3.7	<20	440	2,400	3.2 tr	12 tr
	3/16/00	<42	<100	<25	<100	16	110	<18	<100	1,000	5,500	<27	<100
VMP-1	3/16/00	<0.84	<2.0	0.58	2.3	1.0	6.8	<0.37	<2.0	29	160	<0.53	<2.0
VMP-2	3/16/00	<1.7	<4.0	<1.0	<4.0	2.0	13	<0.73	<4.0	43	230	1.5	5.6
VMP-D1	3/16/00	<17	<40	5.8 tr	23 tr	8.3	56	<7.3	<40	460	2,500	11	42
VMP-D2	3/16/00	<0.84	<2.0	1.2	4.6	0.75	5.1	<0.37	<2.0	39	210	0.83	3.1
Primary Influent	3/16/00	<0.42	<1.0	0.19 tr	0.76 tr	0.46	3.1	<0.18	<1.0	18	97	1.4	5.3
Secondary Effluent	3/16/00	0.0039	0.0094	<0.0013	<0.0050	<0.00074	<0.0050	<0.00092	<0.0050	<0.00093	<0.0050	0.00094 tr	0.0036 tr
Equipment Blank	3/16/00	<0.042	<0.10	<0.025	<0.10	0.064	0.430	<0.018	<0.10	1.7	8.9	<0.027	<0.10

### NOTES:

1,1-DCE = 1,1-dichloroethene

PCE = tetrachloroethene

1,1,1-TCA = 1,1,1-trichloroethane

TCE = trichloroethene

DUP = duplicate sample

ppmv = parts per million by volume

tr = trace (concentration detected at less than method detection limit)

ug/l = micrograms per liter

- = no measurement

< = not detected at indicated method detection limit

1. Samples were collected in Tedlar bags and analyzed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
2. Primary Influent is the sample port located immediately before the first carbon vessel (see Figure 7).
3. Secondary Effluent is the sample port located immediately after the second carbon vessel (see Figure 7).

# TABLE 6a

## ***Soil Vapor Flow Rate Profile and Radius of Influence Data: Shallow Vadose Zone Extraction Well SVE-1***

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	SVE-1		Monitoring Point Vacuum <sup>(1,2)</sup>		
		Well Vacuum (in-wc)	Flow Rate (acfm)	SVE-3 (in-wc)	VMP-1 (in-wc)	VMP-2 (in-wc)
3/16/00	14:45	PRE-STARTUP		-0.01	-0.125	-0.055
	14:50	50	0.3	0.00	-0.10	-
	14:53	50	0.2	<0	0.06	-0.06
	14:54	50	0.3	<0	0.2	-0.05
	14:55	50	0.2	<0	0.31	-0.045
	14:56	50	0.1	<0	0.39	-0.04
	14:57	50	0.1	0.00	0.48	-0.035
	15:00	50	0.2	0.01	0.51	0
	15:01	50	-	-	0.62	0
	15:02	50	-	-	0.72	0
	15:03	50	-	<0	0.85	0.03
	15:04	50	-	-	0.91	0.055
	15:05	50	-	-	0.97	0.075
	15:09	50	0.2	0.00	1.0	0.145
	15:11	INCREASED VACUUM		-	-	-
	15:12	100	0.4	0.00	1.3	0.18
	15:15	100	-	-	1.4	0.21
	15:16	100	-	-	1.5	0.235
	15:18	100	0.2	0.01	1.7	0.275
	15:20	100	0.2	0.01	1.8	0.315
	15:21	100	0.2	0.01	1.9	0.34
	15:23	100	0.2	0.01	2.1	0.39
	15:25	100	0.3	0.01	2.2	0.445
	15:27	SHUT OFF SYSTEM		-	-	0.5
	15:39	0	0	0.01	1.3	0.48
	15:48	0	0	0.015	0.8	0.375
	15:55	0	0	0.01	0.6	0.28

**NOTES:** acfm = actual cubic feet per minute  
in-wc = inches of water column  
- = no measurement

1. A negative vacuum indicates a positive pressure relative to atmospheric conditions.  
A reading of '<0' indicates that the needle on the Dwyer Magnahelic gauge moved slightly to the positive pressure side. A numeric value was not recorded.
2. Extraction well SVE-2 was not monitored because it still had a residual high vacuum from testing at extraction well SVE-D1 (see Table 6b).

# TABLE 6b

## ***Soil Vapor Flow Rate Profile and Radius of Influence Data: Deep Vadose Zone Extraction Well SVE-D1***

Quarterly Progress Report for January through March 2000

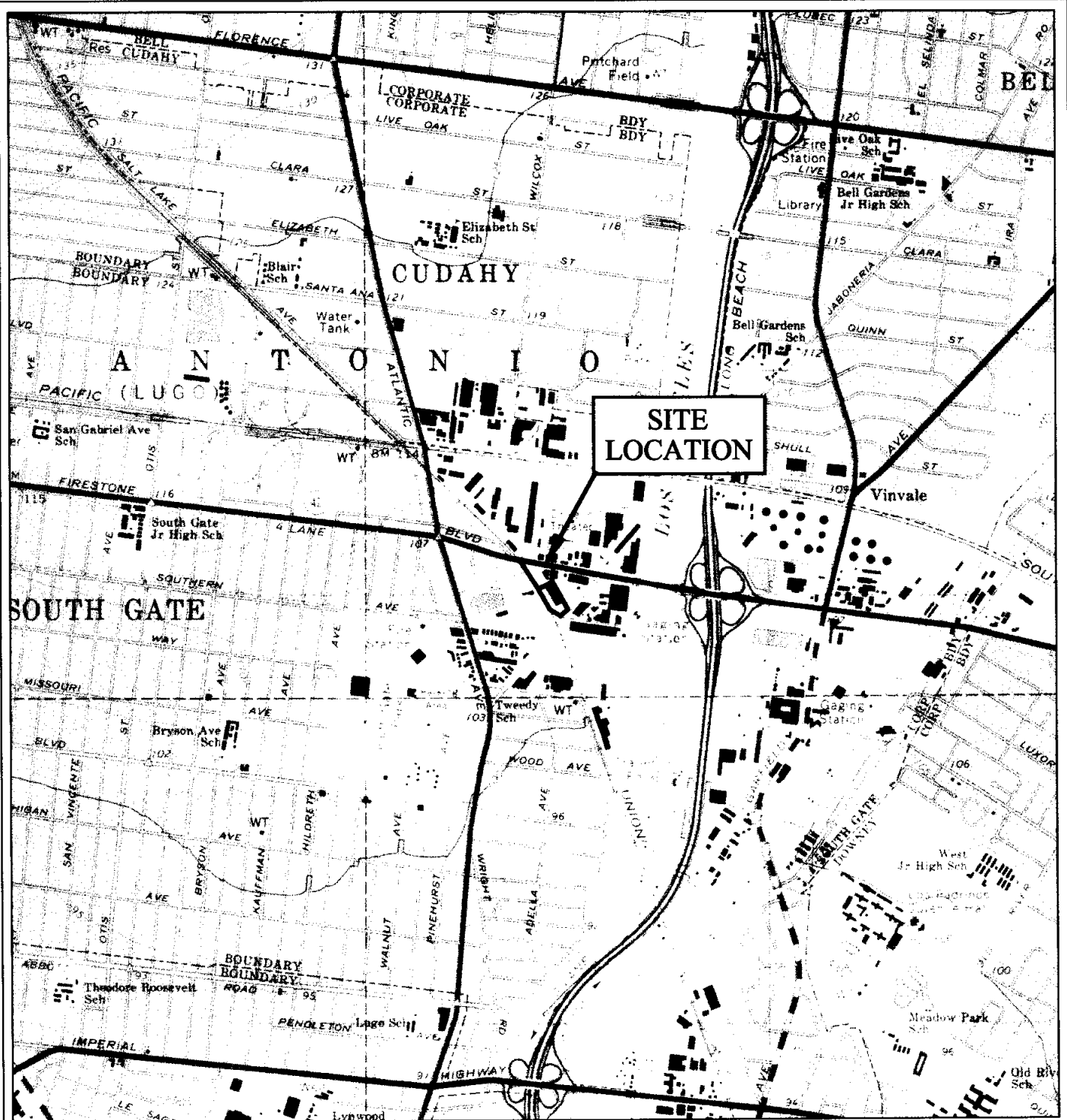
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	SVE-D1		Monitoring Point Vacuum <sup>(1)</sup>						
		Well Vacuum (in-wc)	Flow Rate (acfm)	SVE-1 (in-wc)	SVE-2 (in-wc)	SVE-3 (in-wc)	VMP-1 (in-wc)	VMP-2 (in-wc)	VMP-D1 (in-wc)	VMP-D2 (in-wc)
3/16/00	12:47	PRE-STARTUP		0.04	0.05	0.00	0.07	0.02	0.50	0.23
	13:03	25	20	2.6	0.29	<0	<0	<0	1.5	1.0
	13:09	25	16.9	1.2	0.38	<0	<0	<0	3.6	1.6
	13:16	25	15.7	0.002	0.43	<0	<0	<0	4.7	1.9
	13:35	25	15.2	<0	0.59	<0	<0	<0	5.8	5
		INCREASED VACUUM		-	-	-	-	-	-	-
	13:41	70	52	<0	0.66	<0	<0	<0	7.5	7.1
	13:49	75	44.8	<0	1.2	<0	<0	<0	9.0	7.5
	14:00	75	41.9	<0	1.5	<0	<0	<0	15	13
		INCREASED VACUUM		-	-	-	-	-	-	-
	14:08	120	67.0	<0	1.6	<0	<0	<0	18	16.8
	14:17	125	52.5	<0	2.0	<0	<0	<0	21.6	18.6

**NOTES:** acfm = actual cubic feet per minute  
in-wc = inches of water column  
- = no measurement

1. A negative vacuum indicates a positive pressure relative to atmospheric conditions. A reading of '<0' indicates that the needle on the Dwyer Magnahelic gauge moved slightly to the positive pressure side. A numeric value was not recorded.





0 2,000 4,000  
 (Approximate Scale in Feet)

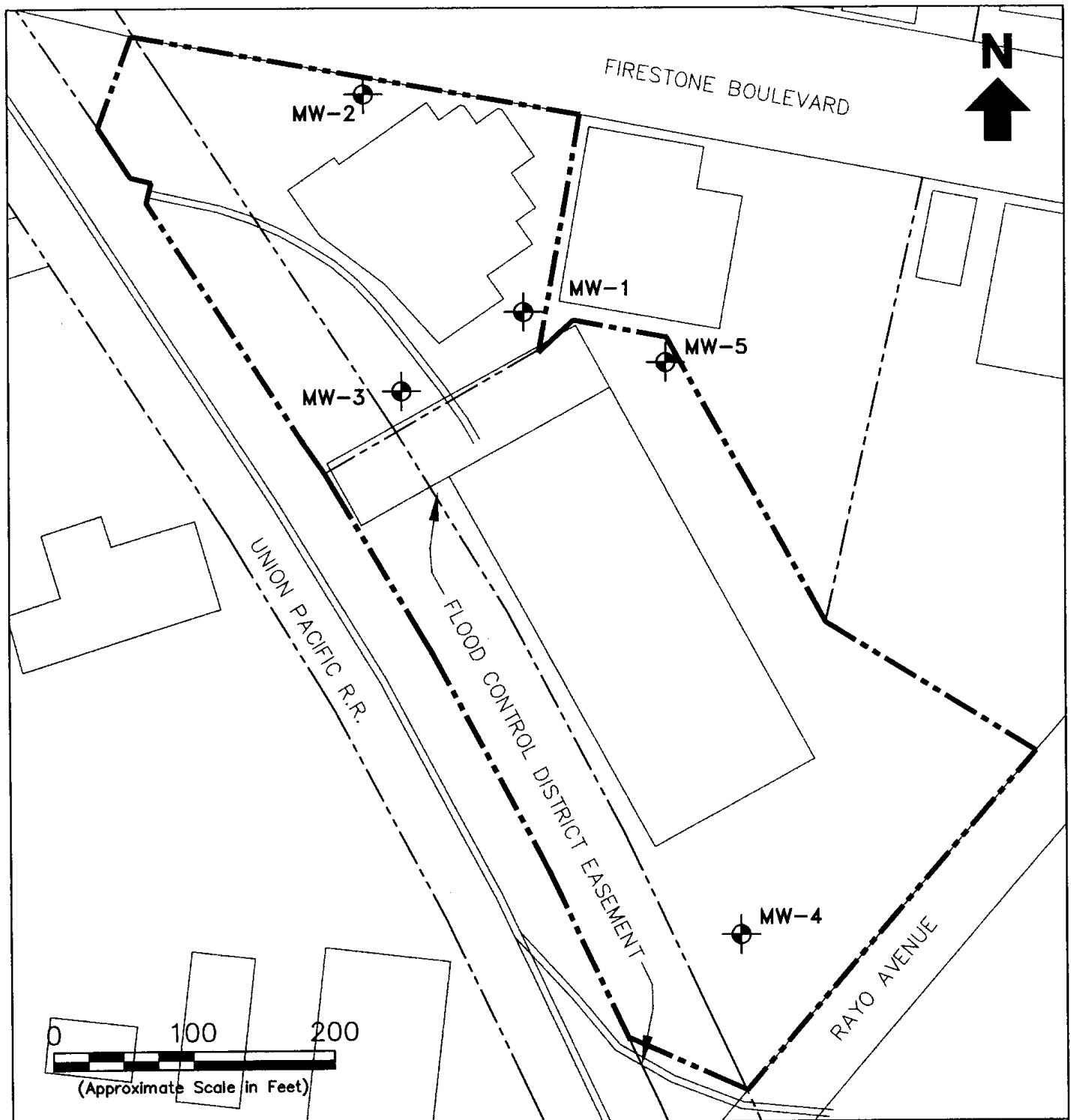
**Erler &  
 Kalinowski, Inc.**

Site Location Map



Source: U.S.G.S 7.5 Minute Series "South Gate"  
 Quadrangle, 1964, photorevised 1981.

Jervis B. Webb Company of California  
 South Gate, California  
 April 2000  
 EKI 991103.01

Figure 1



# **LEGEND**

-  Groundwater Monitoring Well
-  Property Line/Site Boundary

**Erler &  
Kalinowski, Inc.**

Groundwater Monitoring  
Well Locations

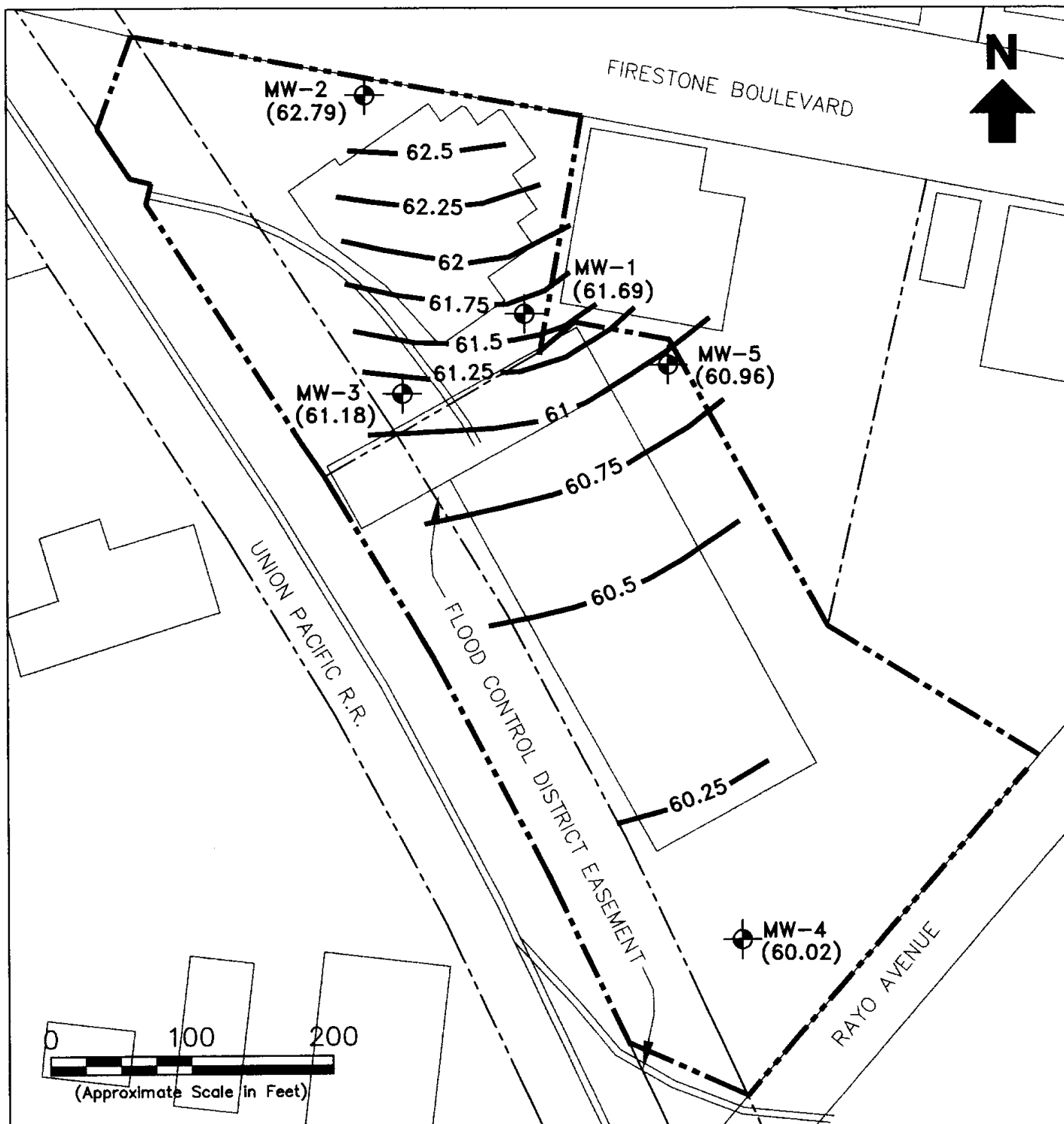
Jervis B. Webb Company of California  
South Gate, California

April 2000  
EKI 991103.01




Figure 2

## **Notes:**

1. All locations are approximate.



## LEGEND

-  Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
-  MW-3 (62.61) Groundwater Monitoring Well with Groundwater Elevation (msl)
-  Property Line/Site Boundary

## Notes:

1. All locations are approximate.

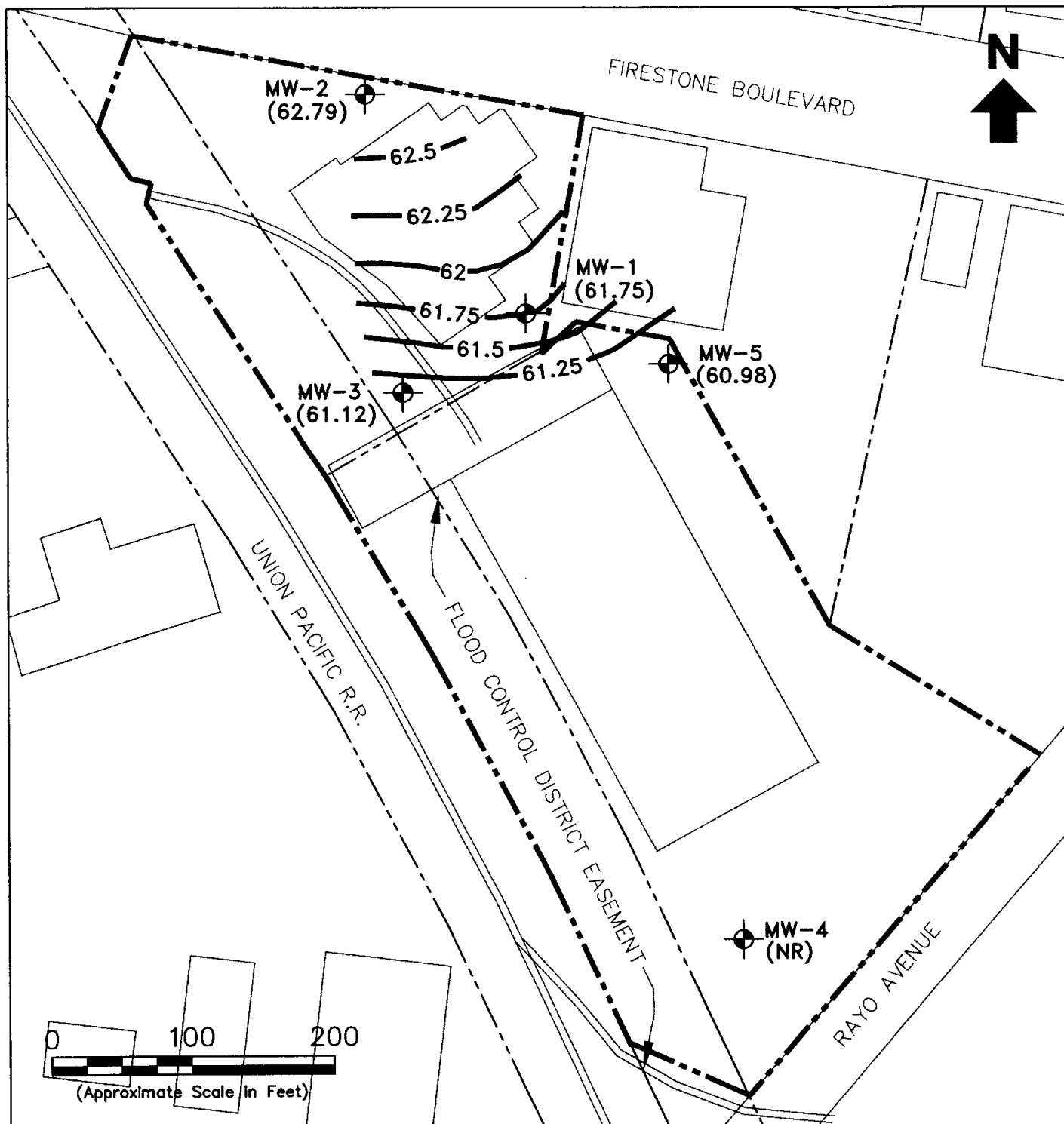
**Erler &  
Kalinowski, Inc.**

Elevation of the Groundwater  
Table on 27 January 2000

Jervis B. Webb Company of California  
South Gate, California

April 2000  
EKI 991103.01

Figure 3



### LEGEND

- Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
- MW-3 (62.61) Groundwater Monitoring Well with Groundwater Elevation (msl)
- Property Line/Site Boundary

### Notes:

1. All locations are approximate.

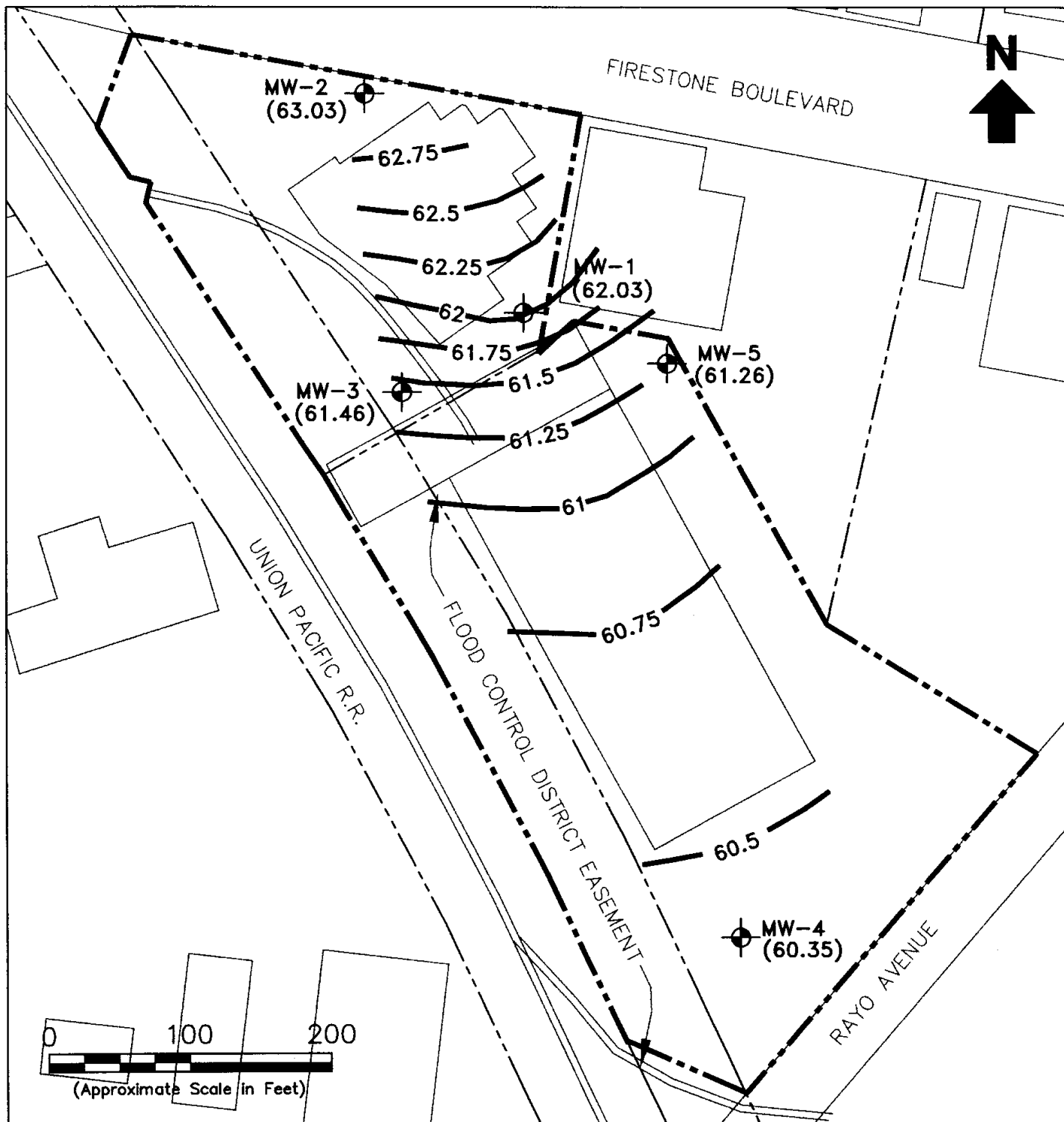
**Erler &  
Kalinowski, Inc.**

Elevation of the Groundwater  
Table on 28 February 2000




Jervis B. Webb Company of California  
South Gate, California

April 2000  
EKL 991103.01

Figure 4



### LEGEND

-  Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
-  MW-3 (62.61) Groundwater Monitoring Well with Groundwater Elevation (msl)
-  Property Line/Site Boundary

### Notes:

1. All locations are approximate.

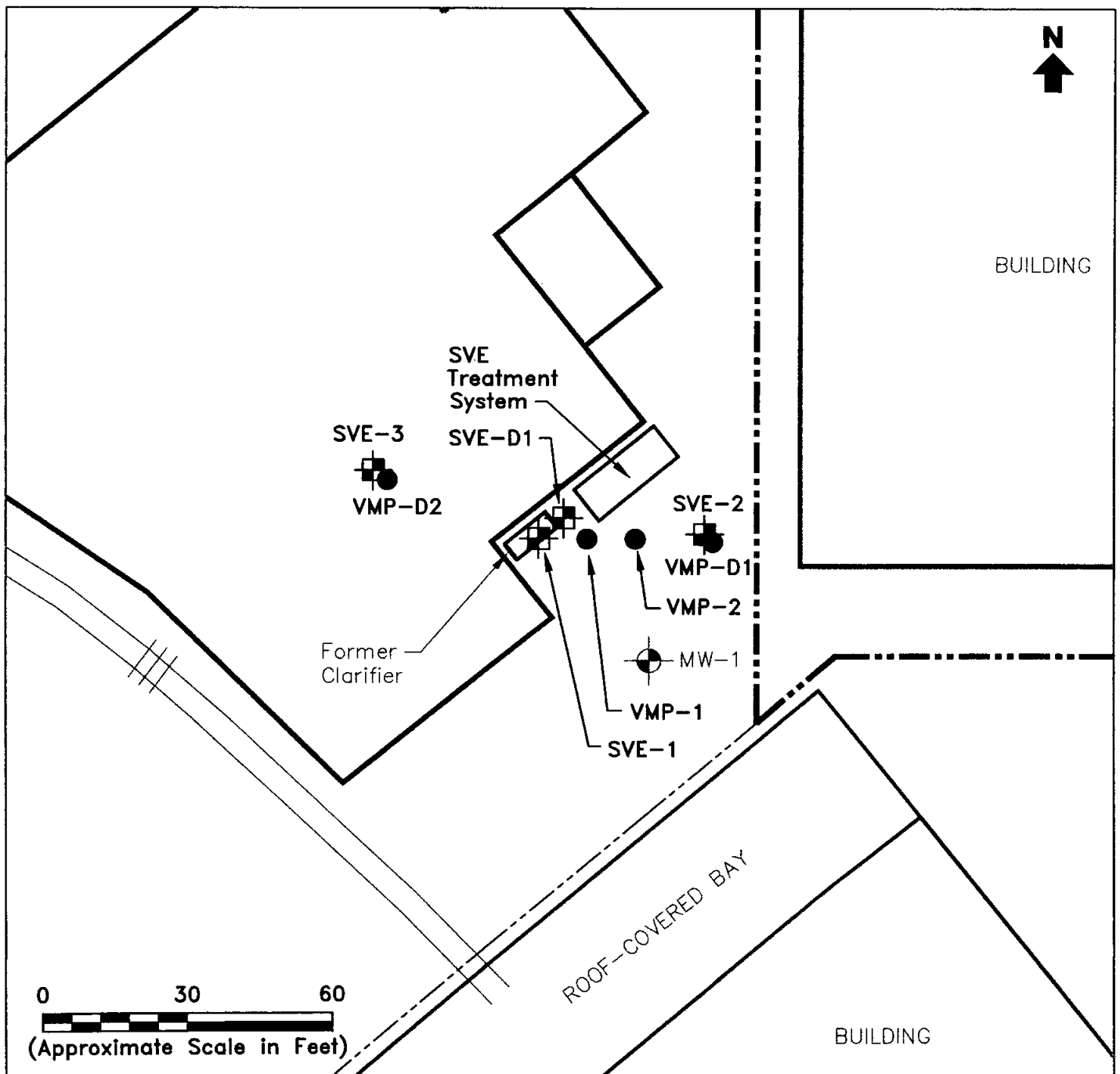
**Erler &  
Kalinowski, Inc.**

Elevation of the Groundwater  
Table on 15 March 2000

Jervis B. Webb Company of California  
South Gate, California

April 2000  
EKI 991103.01

Figure 5



#### LEGEND

- Location of Soil Vapor Extraction Wells
- Location of Vacuum Monitoring Probe
- Location of Groundwater Monitoring Well
- Property Line/Site Boundary
- Building
- Railroad Spur

#### Notes:

1. All locations are approximate.
2. SVE = Soil Vapor Extraction

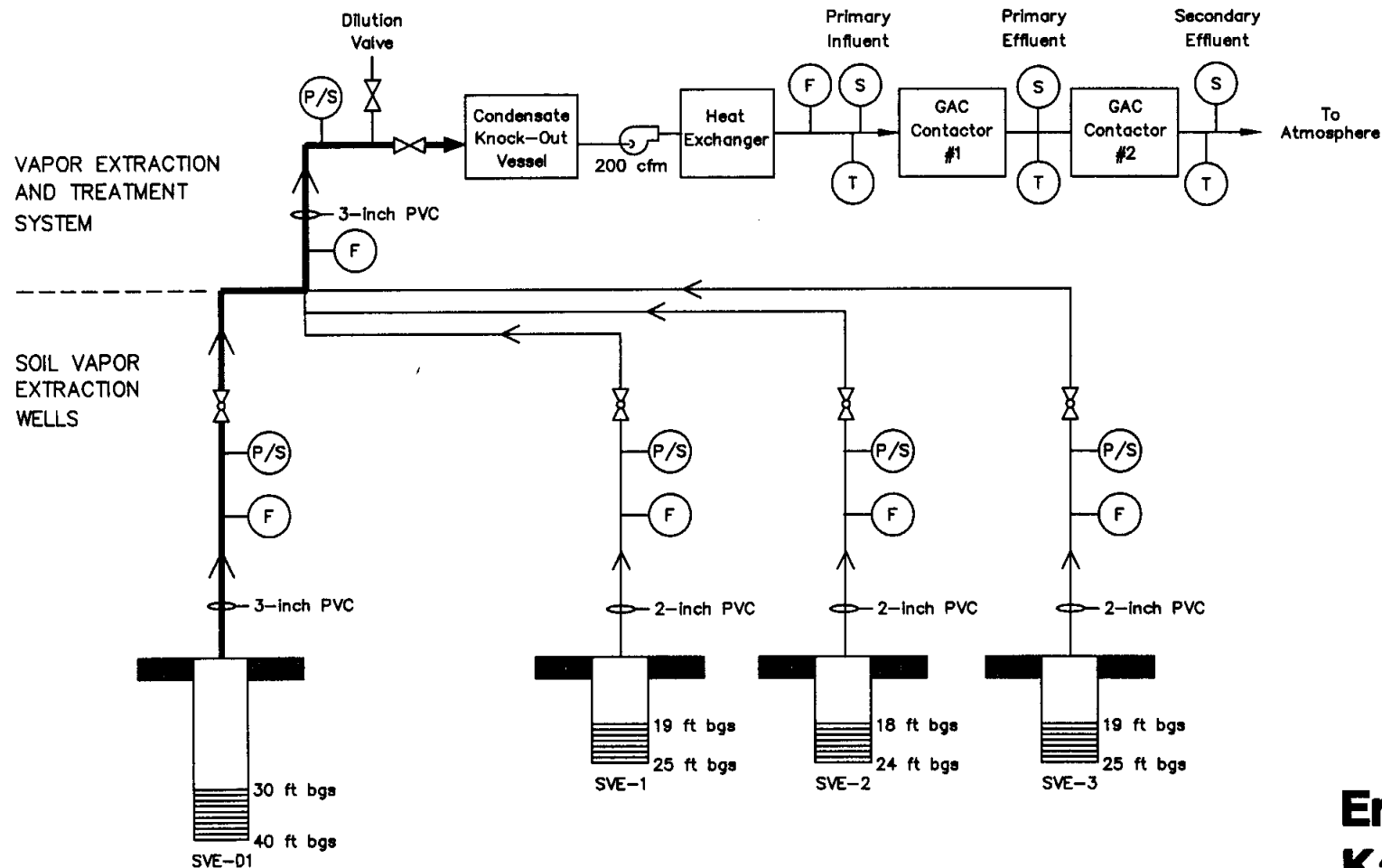
**Erler &  
Kalinowski, Inc.**

Layout of the Soil Vapor  
Extraction System

Jervis B. Webb Company of California  
South Gate, California

April 2000  
EKI 991103.01

Figure 6



**Erler &  
Kallnowski, Inc.**

**Soil Vapor Extraction  
System Schematic**

**Notes:**

1. Not to scale.
2. Pressure/Sampling Ports are 1/4" hose barbs.
3. Abbreviations:

cfm = cubic feet per minute  
ft bgs = feet below ground surface  
GAC = granular activated carbon  
SVE = soil vapor extraction

Jervis B. Webb Company of California  
South Gate, California

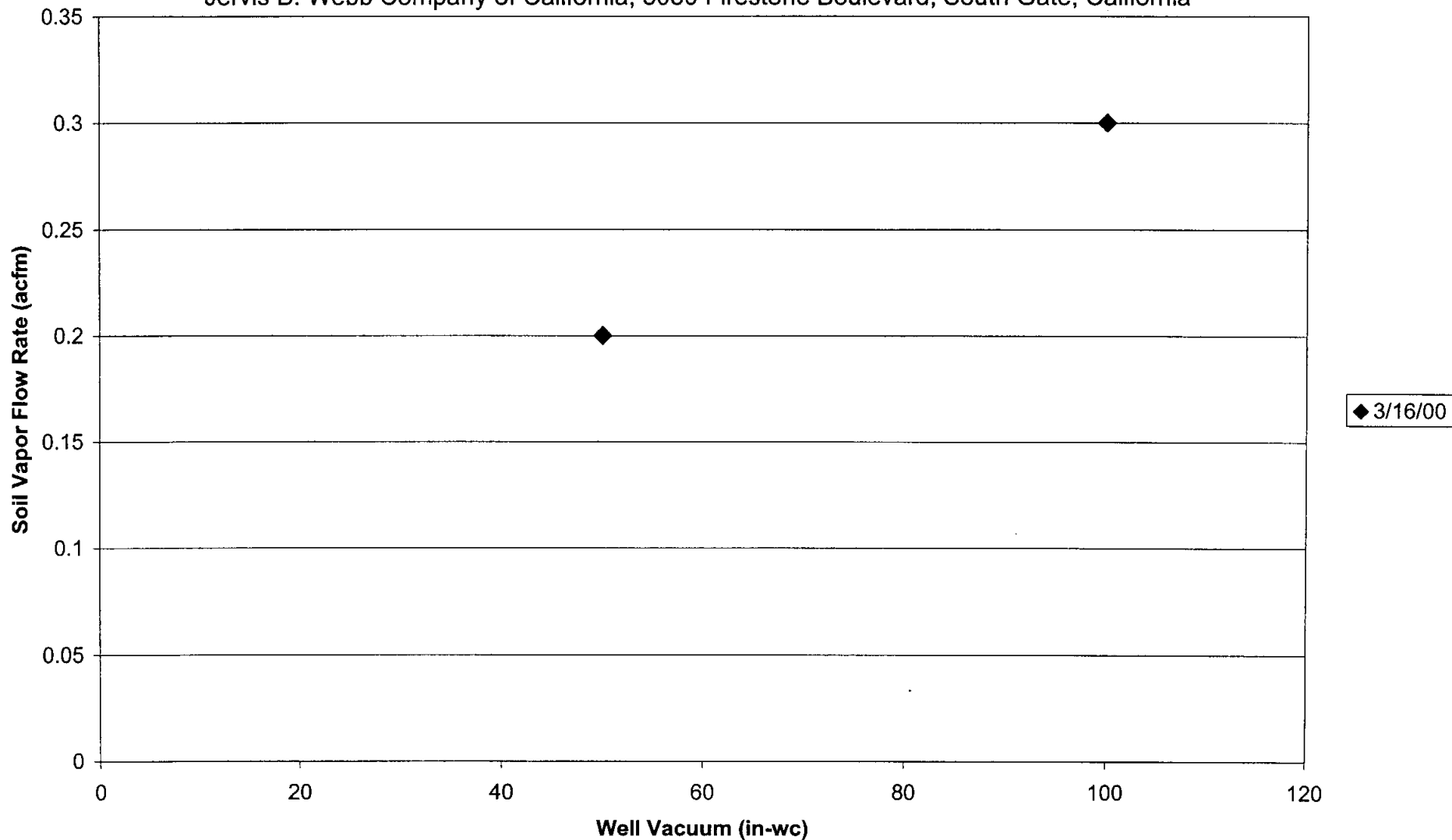
April 2000  
EKI 991103.01

**Figure 7**

**FIGURE 8a**  
**Soil Vapor Flow Rate Profile:**  
**Shallow Vadose Zone Extraction Well SVE-1**

Quarterly Progress Report for January through March 2000

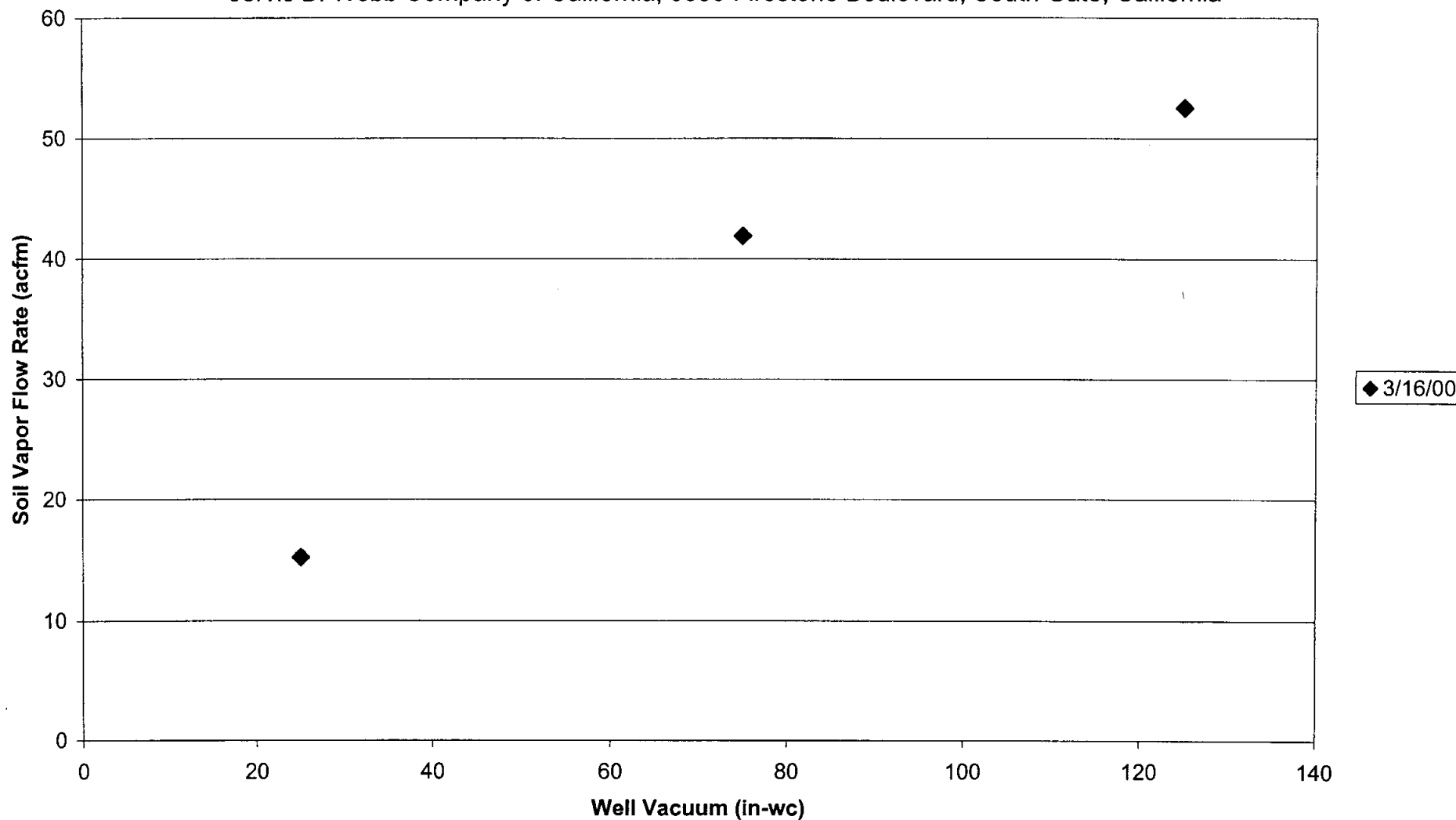
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8b**  
**Soil Vapor Flow Rate Profile:**  
**Deep Vadose Zone Extraction Well SVE-D1**

Quarterly Progress Report for January through March 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



## APPENDICES



## **APPENDIX A**

### **Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling**

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: <u>WEEB</u>				DATE: <u>3/15/00</u>																																																																																			
PROJECT NUMBER: <u>91103.00 991103.0</u>				WELL NUMBER: <u>MW-1</u>		PERSONNEL: <u>BJA</u>																																																																																	
WELL VOLUME CALCULATION:																																																																																							
Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)																																																																																			
<u>69.95</u>	<u>44.06</u>	<u>= 25.89</u>	<u>* 0.64</u>	<u>= 16.6</u>																																																																																			
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.				<u>* 3 = 50</u>																																																																																			
No. of bailers prior to start of purge: <u>0</u>  PURGE METHOD: <u>2" GRUNDFOS</u>  PURGE DEPTH: <u>67'</u>  START TIME: <u>12:41</u> END TIME: <u>13:02</u>  TOTAL GALLONS PURGED: <u>53</u>				INSTRUMENT CALIBRATION																																																																																			
				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Instrument</th> <th>Field measure</th> <th>Standard measure</th> </tr> <tr> <td colspan="3">Conductivity</td> </tr> <tr> <td colspan="3">pH</td> </tr> <tr> <td colspan="3">pH</td> </tr> <tr> <td colspan="3">Turbidity</td> </tr> <tr> <td colspan="3">Temperature</td> </tr> <tr> <td colspan="3">Depth Probe</td> </tr> </table>				Instrument	Field measure	Standard measure	Conductivity			pH			pH			Turbidity			Temperature			Depth Probe																																																													
				Instrument	Field measure	Standard measure																																																																																	
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Temperature																																																																																							
Depth Probe																																																																																							
<div style="border: 1px solid black; padding: 10px; display: inline-block;">SEE MW-4</div>																																																																																							
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GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erlar &  
Kalinowski, Inc.

PROJECT NAME: Webb DATE: 3/15/00  
PROJECT NUMBER: 991103.01 WELL NUMBER: MW-2 PERSONNEL: BJA  
WELL VOLUME CALCULATION:  
Depth of Well (ft.) 69.75 Depth to Water (ft.) 43.62 Water Column (ft.) = 26.13 Multiplier (below) \* 0.64 = 16.7 Casing Vol. (gallons) x 3 = (50)  
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0  
PURGE METHOD: 2" GRUNDFOSS  
PURGE DEPTH: 67'  
START TIME: 9:00 END TIME: 10:25  
TOTAL GALLONS PURGED: 50

INSTRUMENT CALIBRATION  
Instrument Field measure Standard measure  
Conductivity  
pH  
pH  
Turbidity  
Temperature  
Depth Probe

SEE MW-4

Time	9:16	9:40	9:52	10:01	10:17	10:24		
Volume Purged (gallons)	<del>15</del> 12	25	35	40	45	50		
Temperature (degrees F or C)	69.0	72.7	77.6	74.5	74.5	76.4		
pH (units)	7.40	7.30	7.55	7.34	7.33	7.35		
Specific Conductivity (uS/cm)	1,820	1,810	<del>1,860</del>	1,950	1,980	2,070		
Turbidity/Color (NTU)	31.1	17.0	7.43	4.54	<del>3.21</del>	3.16		
Odor	<u>NONE</u>							
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)	<u>0.5</u>							

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested  
SAMPLES: MW-2 10:30 2x40-ml VOA w/HCl 8260  
  
WATER WAS INITIALLY VERY YELLOW, AS IT WAS W 12/99

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: Webb DATE: 3/15/00  
PROJECT NUMBER: 991103.0001 WELL NUMBER: MW-3 PERSONNEL: BJA  
WELL VOLUME CALCULATION:  
Depth of Well (ft.) 69.94 - Depth to Water (ft.) 44.41 = Water Column (ft.) 25.53 \* Multiplier (below) 0.64 = Casing Vol. (gallons) 16.3  
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. x 3 = 49

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" GRUNDFOS

PURGE DEPTH: 67'

START TIME: 10:54

END TIME: 11:15

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity		
pH		
pH		
Turbidity		
Temperature		
Depth Probe		

SEE MW-4

Time	<u>11:00</u>	<u>11:05</u>	<u>11:07</u>	<u>11:10</u>	<u>11:13</u>	<u>11:15</u>		
Volume Purged (gallons)	<u>15</u>	<u>25</u>	<u>30</u>	<u>40</u>	<u>45</u>	<u>50</u>		
Temperature (degrees F or C)	<u>69.5</u>	<u>69.8</u>	<u>70.5</u>	<u>71.3</u>	<u>70.5</u>	<u>70.7</u>		
pH (units)	<u>7.49</u>	<u>7.48</u>	<u>7.51</u>	<u>7.50</u>	<u>7.51</u>	<u>7.53</u>		
Specific Conductivity (uS/cm)	<u>1,310</u>	<u>1,360</u>	<u>1,450</u>	<u>1,500</u>	<u>1,550</u>	<u>1,570</u>		
Turbidity/Color (NTU)	<u>31.6</u>	<u>24.3</u>	<u>8.51</u>	<u>4.75</u>	<u>8.34</u>	<u>4.96</u>		
Odor	<u>NONE</u>							
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)	<u>2</u>							

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-3 11:20 2-40 mL VOASw/HCl 8260

WATER WAS INITIALLY VERY YELLOW

001810

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erlar &  
Kalinowski, Inc.

PROJECT NAME: WEBB

DATE: 3/15/00

PROJECT NUMBER: 991103.01

WELL NUMBER: MW-4

PERSONNEL: BJA

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
69.02	44.37	= 24.65	* 0.64	= 15.8

Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. x3 = (47)

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" GRUNDFOS

PURGE DEPTH: 66'

START TIME: 7:51

END TIME: 8:18

TOTAL GALLONS PURGED: 50

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity	<u>1000</u>	<u>1000</u>
pH	<u>7.02</u>	<u>7.00</u>
pH	<u>3.98</u>	<u>4.0</u>
Turbidity		
Temperature	<u>57°F</u>	
Depth Probe		

Time	7:58	8:02	8:07	8:12	8:17			
Volume Purged (gallons)	10	1520	35	42	50			
Temperature (degrees F or C)	64.6	66.4	66.0	67.5	67.2			
pH (units)	6.87	6.99	7.00	7.01	7.02			
Specific Conductivity (uS/cm)	2,160	2,280	2,220	1,960	2,170			
Turbidity/Color (NTU)	7.15	5.92	3.50	2.06	1.29			
Odor	NONE							
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)	1.5							

COMMENTS/

Field I.D.

Time Collected

Containers & Preservation

Analyses Requested

SAMPLES:

MW-4

8:25

2x40 mL w/ HCl

8260

001811

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: WEBB

DATE: 3/15/00

PROJECT NUMBER: 991103-0001

WELL NUMBER: MW-5

PERSONNEL: BJA

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
68.89	44.87	<del>24.02</del>	0.64	15.4
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.				24.02
				x3 = <u>46</u>

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" GRUNDFOS

PURGE DEPTH: 66'

START TIME: 11:47

END TIME: 12:04

TOTAL GALLONS PURGED: 50

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity		
pH		
pH		
Turbidity		
Temperature		
Depth Probe		

SEE MW-4

Time	11:51	11:53	11:56	11:59	12:01	12:03		
Volume Purged (gallons)	10	20	30	40	45	50		
Temperature (degrees F or C)	70.2	72.0	73.5	73.5	73.0	72.8		
pH (units)	7.46	7.37	7.41	7.39	7.38	7.36		
Specific Conductivity (uS/cm)	2,230	2,470	2,580	2,630	2,660	2,660		
Turbidity/Color (NTU)	6.91	9.87	1.75	1.57	1.63	1.33		
Odor	NONE							
Depth to Water (ft below TOC) during purge								
Number of Casing Volumes removed								
Purge Rate (gallons/minute)	~2							

COMMENTS/	Field I.D.	Time Collected	Containers & Preservation	Analyses Requested
SAMPLES:	<u>MW-5</u>	<u>12:10</u>	<u>2x 40 mL VOA w/HCl</u>	<u>8260</u>
	<u>MW-5-DUP</u>	<u>12:15</u>	<u>"</u>	<u>"</u>

001812

**B**

## **APPENDIX B**

### **Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling**



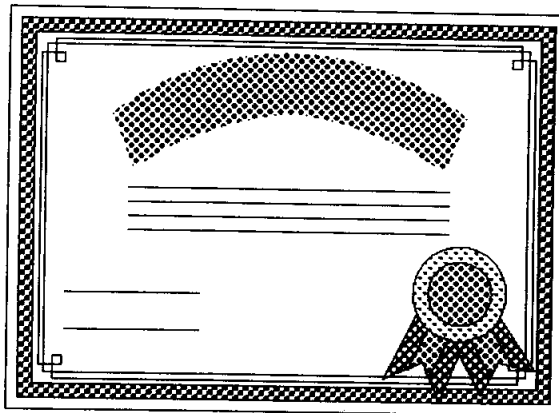
**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

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MAR 27 2000

ERLER & KALINOWSKI, INC.  
SANTA MONICA OFFICE



ORANGE COAST ANALYTICAL THANKS YOU FOR YOUR BUSINESS

THE FOLLOWING PAGES ARE THE ANALYSIS REPORT

ON THE SAMPLES YOU REQUESTED.

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT

PLEASE FEEL FREE TO CONTACT US.



**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification

(ELAP) No.: 1416

Expiration Date: 2001

Laboratory Director's Name (Print): Mark Noorani

Client: Erler & Kalinowski, Inc.

Project No.: 991103.01

Project Name: Webb

Laboratory Reference: EKI 11428

Analytical Method: EPA 8260

Date Sampled: 03/15/00

Date Received: 03/15/00

Date Reported: 03/20/00

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: 



# ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

## ANALYTICAL TEST RESULTS 8260

Reporting Unit: ug/l

DATE ANALYZED		03/17/00	03/17/00	03/17/00	03/17/00
DILUTION FACTOR		1	1	20	20
LAB SAMPLE I.D.			00030071	00030072	00030073
CLIENT SAMPLE I.D.			MW-4	MW-2	MW-3
COMPOUND	MDL	MB			
Acetone	2.0	<2.0	<2.0	<40	<40
Benzene	0.5	<0.5	77	<10	<10
Bromodichloromethane	0.5	<0.5	<0.5	<10	<10
Bromoform	0.5	<0.5	<0.5	<10	<10
Bromomethane	1.0	<1.0	<1.0	<20	<20
2-Butanone	1.0	<1.0	<1.0	<20	<20
Carbon Disulfide	0.5	<0.5	<0.5	<10	<10
Carbon Tetrachloride	0.5	<0.5	<0.5	<10	<10
Chlorobenzene	0.5	<0.5	<0.5	<10	<10
Chlorodibromomethane	0.5	<0.5	<0.5	<10	<10
Chloroethane	0.5	<0.5	<0.5	<10	<10
2-Chloroethyl vinyl ether	1.0	<1.0	<1.0	<20	<20
Chloroform	0.5	<0.5	<0.5	<10	<10
Chloromethane	0.5	<0.5	<0.5	<10	<10
1,1-Dichloroethane	0.5	<0.5	<0.5	<10	11
1,2-Dichloroethane	0.5	<0.5	<0.5	<10	<10
1,1-Dichloroethene	0.5	<0.5	<0.5	<10	61
cis 1,2-Dichloroethene	0.5	<0.5	<0.5	74	300
Trans 1,2-Dichloroethene	0.5	<0.5	<0.5	<10	20
1,2-Dichloropropane	0.5	<0.5	<0.5	<10	<10
cis-1,3-Dichloropropene	0.5	<0.5	<0.5	<10	<10
trans-1,3-Dichloropropene	0.5	<0.5	<0.5	<10	<10
Ethylbenzene	0.5	<0.5	<0.5	<10	<10
2-Hexanone	1.0	<1.0	<1.0	<20	<20
Methylene chloride	2.5	<2.5	<2.5	<50	<50
4-Methyl-2-pentanone	1.0	<1.0	<1.0	<20	<20
Styrene	0.5	<0.5	<0.5	<10	<10
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5	<10	<10
Tetrachloroethene	0.5	<0.5	<0.5	<10	<10
Toluene	0.5	<0.5	<0.5	<10	<10
1,1,1-Trichloroethane	0.5	<0.5	<0.5	<10	<10
1,1,2-Trichloroethane	0.5	<0.5	<0.5	<10	<10
Trichloroethene	0.5	<0.5	0.68	2,800	3,100
Trichlorofluoromethane	0.5	<0.5	<0.5	<10	<10
Vinyl acetate	1.0	<1.0	<1.0	<20	<20
Vinyl Chloride	0.5	<0.5	<0.5	<10	<10
Total Xylenes	0.5	<0.5	<0.5	<10	<10

SURROGATE	SPK	ACP%	MB			
RECOVERY	CONC		%RC			
Dibromofluoromethane	50	80-120%	93	92	95	94
Toluene-d8	50	81-132%	112	112	117	114
4-Bromofluorobenzene	50	83-132%	106	109	111	111

001817

**ORANGE COAST ANALYTICAL, INC.**

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 4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**ANALYTICAL TEST RESULTS 8260****Reporting Unit: ug/l**

DATE ANALYZED		03/17/00	03/17/00	03/17/00	03/17/00
DILUTION FACTOR		1	50	50	200
LAB SAMPLE I.D.			00030074	00030075	00030076
CLIENT SAMPLE I.D.			MW-5	MW-5-DUP	MW-1
COMPOUND	MDL	MB			
Acetone	2.0	<2.0	<100	<100	<400
Benzene	0.5	<0.5	<25	<25	<100
Bromodichloromethane	0.5	<0.5	<25	<25	<100
Bromoform	0.5	<0.5	<25	<25	<100
Bromomethane	1.0	<1.0	<50	<50	<200
2-Butanone	1.0	<1.0	<50	<50	<200
Carbon Disulfide	0.5	<0.5	<25	<25	<100
Carbon Tetrachloride	0.5	<0.5	<25	<25	<100
Chlorobenzene	0.5	<0.5	<25	<25	<100
Chlorodibromomethane	0.5	<0.5	<25	<25	<100
Chloroethane	0.5	<0.5	<25	<25	<100
2-Chloroethyl vinyl ether	1.0	<1.0	<50	<50	<200
Chloroform	0.5	<0.5	<25	<25	<100
Chloromethane	0.5	<0.5	<25	<25	<100
1,1-Dichloroethane	0.5	<0.5	<25	<25	<100
1,2-Dichloroethane	0.5	<0.5	<25	<25	<100
1,1-Dichloroethene	0.5	<0.5	<25	<25	160
cis 1,2-Dichloroethene	0.5	<0.5	440	450	230
Trans 1,2-Dichloroethene	0.5	<0.5	<25	<25	<100
1,2-Dichloropropane	0.5	<0.5	<25	<25	<100
cis-1,3-Dichloropropene	0.5	<0.5	<25	<25	<100
trans-1,3-Dichloropropene	0.5	<0.5	<25	<25	<100
Ethylbenzene	0.5	<0.5	<25	<25	<100
2-Hexanone	1.0	<1.0	<50	<50	<200
Methylene chloride	2.5	<2.5	<125	<125	<500
4-Methyl-2-pentanone	1.0	<1.0	<50	<50	<200
Styrene	0.5	<0.5	<25	<25	<100
1,1,2,2-Tetrachloroethane	0.5	<0.5	<25	<25	<100
Tetrachloroethene	0.5	<0.5	<25	<25	150
Toluene	0.5	<0.5	<25	<25	<100
1,1,1-Trichloroethane	0.5	<0.5	<25	<25	<100
1,1,2-Trichloroethane	0.5	<0.5	<25	<25	<100
Trichloroethene	0.5	<0.5	5,500	5,800	30,000
Trichlorofluoromethane	0.5	<0.5	<25	<25	<100
Vinyl acetate	1.0	<1.0	<50	<50	<200
Vinyl Chloride	0.5	<0.5	<25	<25	<100
Total Xylenes	0.5	<0.5	<25	<25	<100

SURROGATE	SPK	ACP%	MB			
RECOVERY	CONC		%RC			
Dibromofluoromethane	50	80-120%	93	96	98	96
Toluene-d8	50	81-132%	112	117	116	115
4-Bromofluorobenzene	50	83-132%	106	113	112	112

001818

**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**8260 QA / QC REPORT****Reporting Unit : µg/l****1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date Performed : 03/17/00

LAB Sample I. D. : 00030071

Compound	MS	MSD	SPK CONC	MS	MSD	SPK CONC	MS	MSD	SPK CONC
1,1-Dichloroethene	0.0	20	14	15	70	75	7	61-145	14
Benzene	77	20	95	95	90	90	0	76-127	11
Trichloroethene	0.7	20	21	21	102	102	0	71-120	14
Toluene	0.3	20	22	22	109	109	0	76-125	13
Chlorobenzene	0.0	20	19	19	95	95	0	75-130	13

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ) ; PQL = Practical Quantitation Limit.

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS:  $\{(MS-R1)/SP\} \times 100$ .%MSD = Percent Recovery of MSD:  $\{(MSD-R1)/SP\} \times 100$ .RPD = Relative Percent Difference:  $\{(MS - MSD)/(MS + MSD)\} \times 100 \times 2$ 

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

**2. Laboratory Quality Control check sample**

Date Performed : 03/17/00

LAB Sample I. D. : OCA 7558-61, 7563

Compound	SPK CONC	MS	MSD	SPK CONC
trans-1,2-Dichloroethene	50	55	110	80 -120
1,1,1-Trichloroethane	50	55	110	80 -120
1,2-Dichloroethane	50	47	94	80 -120
Tetrachloroethene	50	53	106	80 -120
Styrene	50	57	114	80 -120

ANALYST: Greg HolmesDATE: 03/17/00

001819

**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
 4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**8260 QA / QC REPORT**

Reporting Unit : µg/l

**1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date Performed : 03/17/00

AB Sample I.D. : 00030071

Analyte	R1	SPK CONC	MS	MSD	%MS	%MSD	RPD	AGE	ACP RPD
1,1-Dichloroethene	0.0	20	14	15	70	75	7	61-145	14
Benzene	77	20	95	95	90	90	0	76-127	11
Trichloroethene	0.7	20	21	21	102	102	0	71-120	14
Toluene	0.3	20	22	22	109	109	0	76-125	13
Chlorobenzene	0.0	20	19	19	95	95	0	75-130	13

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration ( ≤5 X PQL ) ; PQL = Practical Quantitation Limit.

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS:  $\{(MS-R1)/SP\} \times 100$ .%MSD = Percent Recovery of MSD:  $\{(MSD-R1)/SP\} \times 100$ .RPD = Relative Percent Difference:  $\{(MS - MSD)/(MS + MSD)\} \times 100 \times 2$ 

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

**2. Laboratory Quality Control check sample**

Date Performed : 03/17/00

AB Sample I.D. : OCA 7558-61, 7563

ANALYTE	SPK CONC	RESULTS	%RECOVERY	AGE
trans-1,2-Dichloroethene	50	55	110	80 -120
1,1,1-Trichloroethane	50	55	110	80 -120
trans-1,2-Dichloroethane	50	47	94	80 -120
tetrachloroethene	50	53	106	80 -120
Styrene	50	57	114	80 -120

ANALYST: Greg HolmesDATE: 03/17/00

001820

**REQUIRED TAT:** \_\_\_\_\_

[illegible]

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

001821

**C**

## **APPENDIX C**

### **Laboratory Reports and Chain-of-Custody Forms for Soil Vapor Sampling**



## Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

### LABORATORY REPORT

Client:	ERLER & KALINOWSKI, INC.	Date of Report:	04/13/00
Address:	3250 Oceanpark Blvd., Suite 385	Date Received:	03/22/00
	Santa Monica, CA 90405	PAI Project No:	P2000638
Contact:	Mr. Brian Auchard	Purchase Order:	Verbal
Client Project ID: WEBB #961025.03			

---

Three (3) Tedlar Bag Samples labeled: "SVE-1" "SVE-D1" "Combined Influent"

---

The samples were received at the laboratory under chain of custody on March 17, 2000. The samples were received intact. The dates of analysis are indicated on the attached data sheets.

#### Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds and tentatively identified compounds. The analyses were performed according to the methodology outlined in EPA Method TO-14A. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT<sub>x</sub>-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data summary sheets.

---

Reviewed and Approved:

Cindy Yoon  
Analytical Chemist

Reviewed and Approved:

Christopher Casteel  
Manager of Technical Operations



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 3

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-1**

**PAI Sample ID : P2000638-001**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/22/00  
Date Received : 3/22/00  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 0.005 ml  
0.001 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	200	ND	97
75-01-4	Vinyl Chloride	ND	200	ND	78
74-83-9	Bromomethane	ND	200	ND	52
75-00-3	Chloroethane	ND	200	ND	76
67-64-1	Acetone	ND	200	ND	84
75-69-4	Trichlorofluoromethane	ND	200	ND	36
75-35-4	1,1-Dichloroethene	ND	200	ND	50
75-09-2	Methylene chloride	ND	200	ND	58
76-13-1	Trichlorotrifluoroethane	ND	200	ND	26
75-15-0	Carbon Disulfide	ND	200	ND	64
156-60-5	trans-1,2-Dichloroethene	ND	200	ND	50
75-34-3	1,1-Dichloroethane	ND	200	ND	49
1634-04-4	Methyl tert-Butyl Ether	ND	200	ND	55
108-05-4	Vinyl Acetate	ND	200	ND	57
78-93-3	2-Butanone	ND	200	ND	68
156-59-2	cis-1,2-Dichloroethene	ND	200	ND	50
67-66-3	Chloroform	ND	200	ND	41
107-06-2	1,2-Dichloroethane	ND	200	ND	49
71-55-6	1,1,1-Trichloroethane	230	200	43	37
71-43-2	Benzene	ND	200	ND	63
56-23-5	Carbon Tetrachloride	ND	200	ND	32
78-87-5	1,2-Dichloropropane	ND	200	ND	43

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 3

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-1**

**PAI Sample ID : P2000638-001**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/22/00  
Date Received : 3/22/00  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 0.005 ml  
0.001 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	200	ND	30
79-01-6	Trichloroethene	54,000	200	10,000	37
10061-01-5	cis-1,3-Dichloropropene	ND	200	ND	44
108-10-1	4-Methyl-2-pentanone	ND	200	ND	49
10061-02-6	trans-1,3-Dichloropropene	ND	200	ND	44
79-00-5	1,1,2-Trichloroethane	ND	200	ND	37
108-88-3	Toluene	160 TR	200	42 TR	53
591-78-6	2-Hexanone	ND	200	ND	49
124-48-1	Dibromochloromethane	ND	200	ND	23
106-93-4	1,2-Dibromoethane	ND	200	ND	26
127-18-4	Tetrachloroethene	930	200	140	30
108-90-7	Chlorobenzene	ND	200	ND	43
100-41-4	Ethylbenzene	ND	200	ND	46
1330-20-7	m- & p-Xylenes	ND	200	ND	46
75-25-2	Bromoform	ND	200	ND	19
100-42-5	Styrene	ND	200	ND	47
95-47-6	o-Xylene	ND	200	ND	46
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	ND	29
541-73-1	1,3-Dichlorobenzene	ND	200	ND	33
106-46-7	1,4-Dichlorobenzene	ND	200	ND	33
95-50-1	1,2-Dichlorobenzene	ND	200	ND	33

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 3 OF 3

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-1**

**PAI Sample ID : P2000638-001**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Cindy Yoon/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/22/00

Date Received : 3/22/00

Date Analyzed : 3/23/00

Volume(s) Analyzed : 0.005 ml  
0.001 ml

D.F. = 1.00

GC / MS RET. TIME	TENTATIVE COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION mg/m <sup>3</sup>
14.06	2,4,4-Trimethyl-1-pentene	200

ND = Not Detected

Verified By: RG

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 3

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1  
PAI Sample ID : P2000638-002

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/22/00  
Date Received : 3/22/00  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 0.050 ml  
0.005 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	20	ND	9.7
75-01-4	Vinyl Chloride	ND	20	ND	7.8
74-83-9	Bromomethane	ND	20	ND	5.2
75-00-3	Chloroethane	ND	20	ND	7.6
67-64-1	Acetone	ND	20	ND	8.4
75-69-4	Trichlorofluoromethane	ND	20	ND	3.6
75-35-4	1,1-Dichloroethene	43	20	11	5.0
75-09-2	Methylene chloride	ND	20	ND	5.8
76-13-1	Trichlorotrifluoroethane	ND	20	ND	2.6
75-15-0	Carbon Disulfide	ND	20	ND	6.4
156-60-5	trans-1,2-Dichloroethene	ND	20	ND	5.0
75-34-3	1,1-Dichloroethane	ND	20	ND	4.9
1634-04-4	Methyl tert-Butyl Ether	ND	20	ND	5.5
108-05-4	Vinyl Acetate	ND	20	ND	5.7
78-93-3	2-Butanone	ND	20	ND	6.8
156-59-2	cis-1,2-Dichloroethene	ND	20	ND	5.0
67-66-3	Chloroform	ND	20	ND	4.1
107-06-2	1,2-Dichloroethane	ND	20	ND	4.9
71-55-6	1,1,1-Trichloroethane	ND	20	ND	3.7
71-43-2	Benzene	ND	20	ND	6.3
56-23-5	Carbon Tetrachloride	ND	20	ND	3.2
78-87-5	1,2-Dichloropropane	ND	20	ND	4.3

TR = Detected Below Indicated Reporting Limit  
ND = Not Detected

Verified By: RG

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 3

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1

PAI Sample ID : P2000638-002

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/22/00  
Date Received : 3/22/00  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 0.050 ml  
0.005 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	20	ND	3.0
79-01-6	Trichloroethene	2,400	20	440	3.7
10061-01-5	cis-1,3-Dichloropropene	ND	20	ND	4.4
108-10-1	4-Methyl-2-pentanone	ND	20	ND	4.9
10061-02-6	trans-1,3-Dichloropropene	ND	20	ND	4.4
79-00-5	1,1,2-Trichloroethane	ND	20	ND	3.7
108-88-3	Toluene	12 TR	20	3.2 TR	5.3
591-78-6	2-Hexanone	ND	20	ND	4.9
124-48-1	Dibromochloromethane	ND	20	ND	2.3
106-93-4	1,2-Dibromoethane	ND	20	ND	2.6
127-18-4	Tetrachloroethene	43	20	6.4	3.0
108-90-7	Chlorobenzene	ND	20	ND	4.3
100-41-4	Ethylbenzene	ND	20	ND	4.6
1330-20-7	m- & p-Xylenes	ND	20	ND	4.6
75-25-2	Bromoform	ND	20	ND	1.9
100-42-5	Styrene	ND	20	ND	4.7
95-47-6	o-Xylene	ND	20	ND	4.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ND	2.9
541-73-1	1,3-Dichlorobenzene	ND	20	ND	3.3
106-46-7	1,4-Dichlorobenzene	ND	20	ND	3.3
95-50-1	1,2-Dichlorobenzene	ND	20	ND	3.3

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 3

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Combined Influent**

**PAI Sample ID : P2000638-003**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Cindy Yoon/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/22/00

Date Received : 3/22/00

Date Analyzed : 3/23/00

Volume(s) Analyzed : 0.050 ml

0.005 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	20	ND	9.7
75-01-4	Vinyl Chloride	ND	20	ND	7.8
74-83-9	Bromomethane	ND	20	ND	5.2
75-00-3	Chloroethane	ND	20	ND	7.6
67-64-1	Acetone	ND	20	ND	8.4
75-69-4	Trichlorofluoromethane	ND	20	ND	3.6
75-35-4	1,1-Dichloroethene	ND	20	ND	5.0
75-09-2	Methylene chloride	ND	20	ND	5.8
76-13-1	Trichlorotrifluoroethane	ND	20	ND	2.6
75-15-0	Carbon Disulfide	ND	20	ND	6.4
156-60-5	trans-1,2-Dichloroethene	ND	20	ND	5.0
75-34-3	1,1-Dichloroethane	ND	20	ND	4.9
1634-04-4	Methyl tert-Butyl Ether	ND	20	ND	5.5
108-05-4	Vinyl Acetate	ND	20	ND	5.7
78-93-3	2-Butanone	ND	20	ND	6.8
156-59-2	cis-1,2-Dichloroethene	ND	20	ND	5.0
67-66-3	Chloroform	ND	20	ND	4.1
107-06-2	1,2-Dichloroethane	ND	20	ND	4.9
71-55-6	1,1,1-Trichloroethane	16 TR	20	3.0 TR	3.7
71-43-2	Benzene	ND	20	ND	6.3
56-23-5	Carbon Tetrachloride	ND	20	ND	3.2
78-87-5	1,2-Dichloropropane	ND	20	ND	4.3

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RC

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory

A Division of Columbia Analytical Services, Inc.

An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 3 OF 3

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1

PAI Sample ID : P2000638-002

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Cindy Yoon/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/22/00

Date Received : 3/22/00

Date Analyzed : 3/23/00

Volume(s) Analyzed : 0.050 ml  
0.005 ml

D.F. = 1.00

GC / MS RET. TIME	TENTATIVE COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION mg/m <sup>3</sup>
5.01	Isobutane	200
5.34	n-Butane	30
6.42	2-Methylbutane	200
6.95	n-Pentane	20
8.79	2-Methylpentane	40
9.24	3-Methylpentane	40
24.17	2-Ethyl-1-hexanol	30
25.28	C <sub>11</sub> H <sub>24</sub> Alkane	30
26.11	C <sub>11</sub> H <sub>24</sub> Alkane	40

ND = Not Detected

Verified By: RG Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 3

Client : Erler & Kalinowski, Inc.

Client Sample ID : Combined Influent

PAI Sample ID : P2000638-003

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Cindy Yoon/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/22/00

Date Received : 3/22/00

Date Analyzed : 3/23/00

Volume(s) Analyzed : 0.050 ml  
0.005 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	20	ND	3.0
79-01-6	Trichloroethene	2,600	20	490	3.7
10061-01-5	cis-1,3-Dichloropropene	ND	20	ND	4.4
108-10-1	4-Methyl-2-pentanone	ND	20	ND	4.9
10061-02-6	trans-1,3-Dichloropropene	ND	20	ND	4.4
79-00-5	1,1,2-Trichloroethane	ND	20	ND	3.7
108-88-3	Toluene	15 TR	20	3.9 TR	5.3
591-78-6	2-Hexanone	ND	20	ND	4.9
124-48-1	Dibromochloromethane	ND	20	ND	2.3
106-93-4	1,2-Dibromoethane	ND	20	ND	2.6
127-18-4	Tetrachloroethene	75	20	11	3.0
108-90-7	Chlorobenzene	ND	20	ND	4.3
100-41-4	Ethylbenzene	ND	20	ND	4.6
1330-20-7	m- & p-Xylenes	ND	20	ND	4.6
75-25-2	Bromoform	ND	20	ND	1.9
100-42-5	Styrene	ND	20	ND	4.7
95-47-6	o-Xylene	ND	20	ND	4.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ND	2.9
541-73-1	1,3-Dichlorobenzene	ND	20	ND	3.3
106-46-7	1,4-Dichlorobenzene	ND	20	ND	3.3
95-50-1	1,2-Dichlorobenzene	ND	20	ND	3.3

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory

A Division of Columbia Analytical Services, Inc.

An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 3 OF 3

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Combined Influent**

**PAI Sample ID : P2000638-003**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Cindy Yoon/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/22/00

Date Received : 3/22/00

Date Analyzed : 3/23/00

Volume(s) Analyzed : 0.050 ml  
0.005 ml

D.F. = 1.00

GC / MS RET. TIME	TENTATIVE COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION mg/m <sup>3</sup>
24.16	2-Ethyl-1-hexanol	30
26.10	C <sub>11</sub> H <sub>24</sub> Alkane	20

ND = Not Detected

Verified By: RG Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 3

Client : Erler & Kalinowski, Inc.

Client Sample ID : Method Blank

PAI Sample ID : P000323-MB

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : N/A  
Date Received : N/A  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 3

Client : Erler & Kalinowski, Inc.

Client Sample ID : Method Blank

PAI Sample ID : P000323-MB

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : N/A  
Date Received : N/A  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 4/5/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 3 OF 3

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Method Blank**

**PAI Sample ID : P000323-MB**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Cindy Yoon/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : N/A  
Date Received : N/A  
Date Analyzed : 3/23/00  
Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

GC / MS RET. TIME	TENTATIVE COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION $\mu\text{g}/\text{m}^3$
	NO COMPOUNDS DETECTED	ND

ND = Not Detected

Verified By: RC Date: 4/5/00

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

**Erler & Kalinowski, Inc.**

Analytical Laboratory: *PERFORMANCE*

Project Number: 961025.03

Date Sampled: 3/22/00

Project Name: **NEBB**

Sampled By: *RCH*

Source of Samples: SVE SYSTEM

Report Results To: **BRIAN AUCHARD**

Location: 5030 FINESTONE BLVD., SOUTH GATE, CA

Phone Number: (310) 314-8855

[illegible]

Special Instructions:

TRANSIT VIA COAST COURIER FROM EKI, SANTA MONICA TO  
PERFORMANCE, SIMI VALLEY.

Relinquished By:

Name / Signature // Affiliation

Date \_\_\_\_\_

## Time

Received By:

Name / Signature / Affiliation

ROB HESSE / *[Signature]*

/ЕК:

3/22/00

10:00

ROGER SACHS / COAST COVIER

3/2/10

19. a.

Wade Henton Wade PAI 3/22/00 1800

3/22/00 1500

001837



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

# RECEIVED

APR 14 2000

## LABORATORY REPORT

ERLER & KALINOWSKI, INC.  
SANTA MONICA OFFICE

Client: ERLER & KALINOWSKI, INC.

Date of Report: 04/13/00

Address: 3250 Oceanpark Blvd., Suite 385

Date Received: 03/17/00

Santa Monica, CA 90405

PAI Project No: P2000586

Contact: Mr. Brian Auchard

Purchase Order: Verbal

Client Project ID: WEBB #961025.03

### Thirteen (13) Tedlar Bag Samples labeled:

"SVE-D1"	"SVE-1"	"Equipment Blank"	"SVE-3"
"SVE-2"	"SVE-2-Dup"	"VMP-D1"	"VMP-D2"
"VMP-2"	"VMP-1"	"Blower Influent"	"Primary Influent"
"Secondary Effluent"			

The samples were received at the laboratory under chain of custody on March 17, 2000. The samples were received intact. The dates of analysis are indicated on the attached data sheets.

### Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-14A. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical systems used were comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT<sub>x</sub>-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data summary sheets.

Reviewed and Approved:

Chris Parnell  
Senior Chemist

Reviewed and Approved:

Christopher Casteel  
Manager of Technical Operations



# Performance Analytical Inc.

Air Quality Laboratory

A Division of Columbia Analytical Services, Inc.

An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-D1**

**PAI Sample ID : P2000586-001**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.010 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	100	ND	48
75-01-4	Vinyl Chloride	ND	100	ND	39
74-83-9	Bromomethane	ND	100	ND	26
75-00-3	Chloroethane	ND	100	ND	38
67-64-1	Acetone	ND	100	ND	42
75-69-4	Trichlorofluoromethane	ND	100	ND	18
75-35-4	1,1-Dichloroethene	ND	100	ND	25
75-09-2	Methylene chloride	ND	100	ND	29
76-13-1	Trichlorotrifluoroethane	ND	100	ND	13
75-15-0	Carbon Disulfide	ND	100	ND	32
156-60-5	trans-1,2-Dichloroethene	ND	100	ND	25
75-34-3	1,1-Dichloroethane	ND	100	ND	25
1634-04-4	Methyl tert-Butyl Ether	ND	100	ND	28
108-05-4	Vinyl Acetate	ND	100	ND	28
78-93-3	2-Butanone	ND	100	ND	34
156-59-2	cis-1,2-Dichloroethene	ND	100	ND	25
67-66-3	Chloroform	ND	100	ND	20
107-06-2	1,2-Dichloroethane	ND	100	ND	25
71-55-6	1,1,1-Trichloroethane	ND	100	ND	18
71-43-2	Benzene	ND	100	ND	31
56-23-5	Carbon Tetrachloride	ND	100	ND	16
78-87-5	1,2-Dichloropropane	ND	100	ND	22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RC

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-D1**

**PAI Sample ID : P2000586-001**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.010 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	100	ND	15
79-01-6	Trichloroethene	5,500	100	1,000	19
10061-01-5	cis-1,3-Dichloropropene	ND	100	ND	22
108-10-1	4-Methyl-2-pentanone	ND	100	ND	24
10061-02-6	trans-1,3-Dichloropropene	ND	100	ND	22
79-00-5	1,1,2-Trichloroethane	ND	100	ND	18
108-88-3	Toluene	ND	100	ND	27
591-78-6	2-Hexanone	ND	100	ND	24
124-48-1	Dibromochloromethane	ND	100	ND	12
106-93-4	1,2-Dibromoethane	ND	100	ND	13
127-18-4	Tetrachloroethene	110	100	16	15
108-90-7	Chlorobenzene	ND	100	ND	22
100-41-4	Ethylbenzene	ND	100	ND	23
1330-20-7	m- & p-Xylenes	ND	100	ND	23
75-25-2	Bromoform	ND	100	ND	9.7
100-42-5	Styrene	ND	100	ND	23
95-47-6	o-Xylene	ND	100	ND	23
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ND	15
541-73-1	1,3-Dichlorobenzene	ND	100	ND	17
106-46-7	1,4-Dichlorobenzene	ND	100	ND	17
95-50-1	1,2-Dichlorobenzene	ND	100	ND	17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-1**

**PAI Sample ID : P2000586-002**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Chris Parnell/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/16/00  
Date Received : 3/17/00  
Date Analyzed : 3/18/00  
Volume(s) Analyzed : 0.0020 ml  
0.0010 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	500	ND	240
75-01-4	Vinyl Chloride	ND	500	ND	200
74-83-9	Bromomethane	ND	500	ND	130
75-00-3	Chloroethane	ND	500	ND	190
67-64-1	Acetone	ND	500	ND	210
75-69-4	Trichlorofluoromethane	ND	500	ND	89
75-35-4	1,1-Dichloroethene	ND	500	ND	130
75-09-2	Methylene chloride	ND	500	ND	140
76-13-1	Trichlorotrifluoroethane	ND	500	ND	65
75-15-0	Carbon Disulfide	ND	500	ND	160
156-60-5	trans-1,2-Dichloroethene	ND	500	ND	130
75-34-3	1,1-Dichloroethane	ND	500	ND	120
1634-04-4	Methyl tert-Butyl Ether	ND	500	ND	140
108-05-4	Vinyl Acetate	ND	500	ND	140
78-93-3	2-Butanone	ND	500	ND	170
156-59-2	cis-1,2-Dichloroethene	ND	500	ND	130
67-66-3	Chloroform	ND	500	ND	100
107-06-2	1,2-Dichloroethane	ND	500	ND	120
71-55-6	1,1,1-Trichloroethane	290 TR	500	53 TR	92
71-43-2	Benzene	ND	500	ND	160
56-23-5	Carbon Tetrachloride	ND	500	ND	80
78-87-5	1,2-Dichloropropane	ND	500	ND	110

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-1**

**PAI Sample ID : P2000586-002**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Chris Parnell/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/16/00  
Date Received : 3/17/00  
Date Analyzed : 3/18/00  
Volume(s) Analyzed : 0.0020 ml  
0.0010 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	500	ND	75
79-01-6	Trichloroethene	54,000	500	10,000	93
10061-01-5	cis-1,3-Dichloropropene	ND	500	ND	110
108-10-1	4-Methyl-2-pentanone	ND	500	ND	120
10061-02-6	trans-1,3-Dichloropropene	ND	500	ND	110
79-00-5	1,1,2-Trichloroethane	ND	500	ND	92
108-88-3	Toluene	660	500	170	130
591-78-6	2-Hexanone	ND	500	ND	120
124-48-1	Dibromochloromethane	ND	500	ND	59
106-93-4	1,2-Dibromoethane	ND	500	ND	65
127-18-4	Tetrachloroethene	1,600	500	230	74
108-90-7	Chlorobenzene	ND	500	ND	110
100-41-4	Ethylbenzene	ND	500	ND	120
1330-20-7	m- & p-Xylenes	ND	500	ND	120
75-25-2	Bromoform	ND	500	ND	48
100-42-5	Styrene	ND	500	ND	120
95-47-6	o-Xylene	ND	500	ND	120
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	ND	73
541-73-1	1,3-Dichlorobenzene	ND	500	ND	83
106-46-7	1,4-Dichlorobenzene	ND	500	ND	83
95-50-1	1,2-Dichlorobenzene	ND	500	ND	83

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RC Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Equipment Blank

PAI Sample ID : P2000586-003

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.010 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	100	ND	15
79-01-6	Trichloroethene	8,900	100	1,700	19
10061-01-5	cis-1,3-Dichloropropene	ND	100	ND	22
108-10-1	4-Methyl-2-pentanone	ND	100	ND	24
10061-02-6	trans-1,3-Dichloropropene	ND	100	ND	22
79-00-5	1,1,2-Trichloroethane	ND	100	ND	18
108-88-3	Toluene	ND	100	ND	27
591-78-6	2-Hexanone	ND	100	ND	24
124-48-1	Dibromochloromethane	ND	100	ND	12
106-93-4	1,2-Dibromoethane	ND	100	ND	13
127-18-4	Tetrachloroethene	430	100	64	15
108-90-7	Chlorobenzene	ND	100	ND	22
100-41-4	Ethylbenzene	ND	100	ND	23
1330-20-7	m- & p-Xylenes	ND	100	ND	23
75-25-2	Bromoform	ND	100	ND	9.7
100-42-5	Styrene	ND	100	ND	23
95-47-6	o-Xylene	ND	100	ND	23
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ND	15
541-73-1	1,3-Dichlorobenzene	ND	100	ND	17
106-46-7	1,4-Dichlorobenzene	ND	100	ND	17
95-50-1	1,2-Dichlorobenzene	ND	100	ND	17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Equipment Blank**

**PAI Sample ID : P2000586-003**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.010 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	ND	100	ND	48
75-01-4	Vinyl Chloride	ND	100	ND	39
74-83-9	Bromomethane	ND	100	ND	26
75-00-3	Chloroethane	ND	100	ND	38
67-64-1	Acetone	ND	100	ND	42
75-69-4	Trichlorofluoromethane	ND	100	ND	18
75-35-4	1,1-Dichloroethene	ND	100	ND	25
75-09-2	Methylene chloride	ND	100	ND	29
76-13-1	Trichlorotrifluoroethane	ND	100	ND	13
75-15-0	Carbon Disulfide	ND	100	ND	32
156-60-5	trans-1,2-Dichloroethene	ND	100	ND	25
75-34-3	1,1-Dichloroethane	ND	100	ND	25
1634-04-4	Methyl tert-Butyl Ether	ND	100	ND	28
108-05-4	Vinyl Acetate	ND	100	ND	28
78-93-3	2-Butanone	ND	100	ND	34
156-59-2	cis-1,2-Dichloroethene	ND	100	ND	25
67-66-3	Chloroform	ND	100	ND	20
107-06-2	1,2-Dichloroethane	ND	100	ND	25
71-55-6	1,1,1-Trichloroethane	ND	100	ND	18
71-43-2	Benzene	ND	100	ND	31
56-23-5	Carbon Tetrachloride	ND	100	ND	16
78-87-5	1,2-Dichloropropane	ND	100	ND	22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-3**

**PAI Sample ID : P2000586-004**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	2.0	ND	0.97
75-01-4	Vinyl Chloride	ND	2.0	ND	0.78
74-83-9	Bromomethane	ND	2.0	ND	0.52
75-00-3	Chloroethane	ND	2.0	ND	0.76
67-64-1	Acetone	ND	2.0	ND	0.84
75-69-4	Trichlorofluoromethane	ND	2.0	ND	0.36
75-35-4	1,1-Dichloroethene	2.2	2.0	0.56	0.50
75-09-2	Methylene chloride	ND	2.0	ND	0.58
76-13-1	Trichlorotrifluoroethane	ND	2.0	ND	0.26
75-15-0	Carbon Disulfide	ND	2.0	ND	0.64
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.50
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.55
108-05-4	Vinyl Acetate	ND	2.0	ND	0.57
78-93-3	2-Butanone	ND	2.0	ND	0.68
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50
67-66-3	Chloroform	ND	2.0	ND	0.41
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.37
71-43-2	Benzene	ND	2.0	ND	0.63
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.43

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-3**

**PAI Sample ID : P2000586-004**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30
79-01-6	Trichloroethene	130	2.0	25	0.37
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.44
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.49
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37
108-88-3	Toluene	ND	2.0	ND	0.53
591-78-6	2-Hexanone	ND	2.0	ND	0.49
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26
127-18-4	Tetrachloroethene	18	2.0	2.7	0.30
108-90-7	Chlorobenzene	ND	2.0	ND	0.43
100-41-4	Ethylbenzene	ND	2.0	ND	0.46
1330-20-7	m- & p-Xylenes	ND	2.0	ND	0.46
75-25-2	Bromoform	ND	2.0	ND	0.19
100-42-5	Styrene	ND	2.0	ND	0.47
95-47-6	o-Xylene	ND	2.0	ND	0.46
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.29
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.33
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.33
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.33

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RL Date: 3/30/00



# Performance Analytical Inc.

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An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-3**

**PAI Sample ID : P2000586-004DUP**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	2.0	ND	0.97
75-01-4	Vinyl Chloride	ND	2.0	ND	0.78
74-83-9	Bromomethane	ND	2.0	ND	0.52
75-00-3	Chloroethane	ND	2.0	ND	0.76
67-64-1	Acetone	ND	2.0	ND	0.84
75-69-4	Trichlorofluoromethane	ND	2.0	ND	0.36
75-35-4	1,1-Dichloroethene	2.2	2.0	0.57	0.50
75-09-2	Methylene chloride	ND	2.0	ND	0.58
76-13-1	Trichlorotrifluoroethane	ND	2.0	ND	0.26
75-15-0	Carbon Disulfide	ND	2.0	ND	0.64
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.50
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.55
108-05-4	Vinyl Acetate	ND	2.0	ND	0.57
78-93-3	2-Butanone	ND	2.0	ND	0.68
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50
67-66-3	Chloroform	ND	2.0	ND	0.41
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.37
71-43-2	Benzene	ND	2.0	ND	0.63
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.43

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-3

PAI Sample ID : P2000586-004DUP

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30
79-01-6	Trichloroethene	140	2.0	26	0.37
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.44
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.49
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37
108-88-3	Toluene	ND	2.0	ND	0.53
591-78-6	2-Hexanone	ND	2.0	ND	0.49
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26
127-18-4	Tetrachloroethene	22	2.0	3.2	0.30
108-90-7	Chlorobenzene	ND	2.0	ND	0.43
100-41-4	Ethylbenzene	ND	2.0	ND	0.46
1330-20-7	m- & p-Xylenes	ND	2.0	ND	0.46
75-25-2	Bromoform	ND	2.0	ND	0.19
100-42-5	Styrene	ND	2.0	ND	0.47
95-47-6	o-Xylene	ND	2.0	ND	0.46
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.29
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.33
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.33
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.33

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00

Page No.:



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-2**

**PAI Sample ID : P2000586-005**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/16/00  
Date Received : 3/17/00  
Date Analyzed : 3/17/00  
Volume(s) Analyzed : 0.250 ml  
0.125 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	4.0	ND	1.9
75-01-4	Vinyl Chloride	ND	4.0	ND	1.6
74-83-9	Bromomethane	ND	4.0	ND	1.0
75-00-3	Chloroethane	ND	4.0	ND	1.5
67-64-1	Acetone	ND	4.0	ND	1.7
75-69-4	Trichlorofluoromethane	ND	4.0	ND	0.71
75-35-4	1,1-Dichloroethene	2.8 TR	4.0	0.72 TR	1.0
75-09-2	Methylene chloride	ND	4.0	ND	1.2
76-13-1	Trichlorotrifluoroethane	ND	4.0	ND	0.52
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3
156-60-5	trans-1,2-Dichloroethene	ND	4.0	ND	1.0
75-34-3	1,1-Dichloroethane	ND	4.0	ND	0.99
1634-04-4	Methyl tert-Butyl Ether	ND	4.0	ND	1.1
108-05-4	Vinyl Acetate	ND	4.0	ND	1.1
78-93-3	2-Butanone	ND	4.0	ND	1.4
156-59-2	cis-1,2-Dichloroethene	ND	4.0	ND	1.0
67-66-3	Chloroform	ND	4.0	ND	0.82
107-06-2	1,2-Dichloroethane	ND	4.0	ND	0.99
71-55-6	1,1,1-Trichloroethane	ND	4.0	ND	0.73
71-43-2	Benzene	ND	4.0	ND	1.3
56-23-5	Carbon Tetrachloride	ND	4.0	ND	0.64
78-87-5	1,2-Dichloropropane	ND	4.0	ND	0.87

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-2

PAI Sample ID : P2000586-005

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.250 ml

0.125 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	4.0	ND	0.60
79-01-6	Trichloroethene	400	4.0	75	0.74
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	ND	0.88
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	ND	0.88
79-00-5	1,1,2-Trichloroethane	ND	4.0	ND	0.73
108-88-3	Toluene	ND	4.0	ND	1.1
591-78-6	2-Hexanone	ND	4.0	ND	0.98
124-48-1	Dibromochloromethane	ND	4.0	ND	0.47
106-93-4	1,2-Dibromoethane	ND	4.0	ND	0.52
127-18-4	Tetrachloroethene	8.0	4.0	1.2	0.59
108-90-7	Chlorobenzene	ND	4.0	ND	0.87
100-41-4	Ethylbenzene	ND	4.0	ND	0.92
1330-20-7	m- & p-Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	4.0	ND	0.39
100-42-5	Styrene	ND	4.0	ND	0.94
95-47-6	o-Xylene	ND	4.0	ND	0.92
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ND	0.58
541-73-1	1,3-Dichlorobenzene	ND	4.0	ND	0.67
106-46-7	1,4-Dichlorobenzene	ND	4.0	ND	0.67
95-50-1	1,2-Dichlorobenzene	ND	4.0	ND	0.67

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : SVE-2-Dup**

**PAI Sample ID : P2000586-006**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.250 ml  
0.125 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	4.0	ND	1.9
75-01-4	Vinyl Chloride	ND	4.0	ND	1.6
74-83-9	Bromomethane	ND	4.0	ND	1.0
75-00-3	Chloroethane	ND	4.0	ND	1.5
67-64-1	Acetone	ND	4.0	ND	1.7
75-69-4	Trichlorofluoromethane	ND	4.0	ND	0.71
75-35-4	1,1-Dichloroethene	3.2 TR	4.0	0.80 TR	1.0
75-09-2	Methylene chloride	ND	4.0	ND	1.2
76-13-1	Trichlorotrifluoroethane	ND	4.0	ND	0.52
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3
156-60-5	trans-1,2-Dichloroethene	ND	4.0	ND	1.0
75-34-3	1,1-Dichloroethane	ND	4.0	ND	0.99
1634-04-4	Methyl tert-Butyl Ether	ND	4.0	ND	1.1
108-05-4	Vinyl Acetate	ND	4.0	ND	1.1
78-93-3	2-Butanone	ND	4.0	ND	1.4
156-59-2	cis-1,2-Dichloroethene	ND	4.0	ND	1.0
67-66-3	Chloroform	ND	4.0	ND	0.82
107-06-2	1,2-Dichloroethane	ND	4.0	ND	0.99
71-55-6	1,1,1-Trichloroethane	ND	4.0	ND	0.73
71-43-2	Benzene	ND	4.0	ND	1.3
56-23-5	Carbon Tetrachloride	ND	4.0	ND	0.64
78-87-5	1,2-Dichloropropane	ND	4.0	ND	0.87

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU

Date: 3/30/00



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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-2-Dup

PAI Sample ID : P2000586-006

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.250 ml  
0.125 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	4.0	ND	0.60
79-01-6	Trichloroethene	520	4.0	96	0.74
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	ND	0.88
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	ND	0.88
79-00-5	1,1,2-Trichloroethane	ND	4.0	ND	0.73
108-88-3	Toluene	4.8	4.0	1.3	1.1
591-78-6	2-Hexanone	ND	4.0	ND	0.98
124-48-1	Dibromochloromethane	ND	4.0	ND	0.47
106-93-4	1,2-Dibromoethane	ND	4.0	ND	0.52
127-18-4	Tetrachloroethene	10	4.0	1.5	0.59
108-90-7	Chlorobenzene	ND	4.0	ND	0.87
100-41-4	Ethylbenzene	ND	4.0	ND	0.92
1330-20-7	m- & p-Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	4.0	ND	0.39
100-42-5	Styrene	ND	4.0	ND	0.94
95-47-6	o-Xylene	ND	4.0	ND	0.92
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ND	0.58
541-73-1	1,3-Dichlorobenzene	ND	4.0	ND	0.67
106-46-7	1,4-Dichlorobenzene	ND	4.0	ND	0.67
95-50-1	1,2-Dichlorobenzene	ND	4.0	ND	0.67

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D1

PAI Sample ID : P2000586-007

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.025 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	40	ND	19
75-01-4	Vinyl Chloride	ND	40	ND	16
74-83-9	Bromomethane	ND	40	ND	10
75-00-3	Chloroethane	ND	40	ND	15
67-64-1	Acetone	ND	40	ND	17
75-69-4	Trichlorofluoromethane	ND	40	ND	7.1
75-35-4	1,1-Dichloroethene	23 TR	40	5.8 TR	10
75-09-2	Methylene chloride	ND	40	ND	12
76-13-1	Trichlorotrifluoroethane	ND	40	ND	5.2
75-15-0	Carbon Disulfide	ND	40	ND	13
156-60-5	trans-1,2-Dichloroethene	ND	40	ND	10
75-34-3	1,1-Dichloroethane	ND	40	ND	9.9
1634-04-4	Methyl tert-Butyl Ether	ND	40	ND	11
108-05-4	Vinyl Acetate	ND	40	ND	11
78-93-3	2-Butanone	ND	40	ND	14
156-59-2	cis-1,2-Dichloroethene	ND	40	ND	10
67-66-3	Chloroform	ND	40	ND	8.2
107-06-2	1,2-Dichloroethane	ND	40	ND	9.9
71-55-6	1,1,1-Trichloroethane	ND	40	ND	7.3
71-43-2	Benzene	ND	40	ND	13
56-23-5	Carbon Tetrachloride	ND	40	ND	6.4
78-87-5	1,2-Dichloropropane	ND	40	ND	8.7

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RC Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D1

PAI Sample ID : P2000586-007

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.025 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	40	ND	6.0
79-01-6	Trichloroethene	2,500	40	460	7.4
10061-01-5	cis-1,3-Dichloropropene	ND	40	ND	8.8
108-10-1	4-Methyl-2-pentanone	ND	40	ND	9.8
10061-02-6	trans-1,3-Dichloropropene	ND	40	ND	8.8
79-00-5	1,1,2-Trichloroethane	ND	40	ND	7.3
108-88-3	Toluene	42	40	11	11
591-78-6	2-Hexanone	ND	40	ND	9.8
124-48-1	Dibromochloromethane	ND	40	ND	4.7
106-93-4	1,2-Dibromoethane	ND	40	ND	5.2
127-18-4	Tetrachloroethene	56	40	8.3	5.9
108-90-7	Chlorobenzene	ND	40	ND	8.7
100-41-4	Ethylbenzene	ND	40	ND	9.2
1330-20-7	m- & p-Xylenes	ND	40	ND	9.2
75-25-2	Bromoform	ND	40	ND	3.9
100-42-5	Styrene	ND	40	ND	9.4
95-47-6	o-Xylene	ND	40	ND	9.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	40	ND	5.8
541-73-1	1,3-Dichlorobenzene	ND	40	ND	6.7
106-46-7	1,4-Dichlorobenzene	ND	40	ND	6.7
95-50-1	1,2-Dichlorobenzene	ND	40	ND	6.7

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU Date: 3/30/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2

PAI Sample ID : P2000586-008

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	2.0	ND	0.97
75-01-4	Vinyl Chloride	ND	2.0	ND	0.78
74-83-9	Bromomethane	ND	2.0	ND	0.52
75-00-3	Chloroethane	ND	2.0	ND	0.76
67-64-1	Acetone	ND	2.0	ND	0.84
75-69-4	Trichlorofluoromethane	ND	2.0	ND	0.36
75-35-4	1,1-Dichloroethene	4.6	2.0	1.2	0.50
75-09-2	Methylene chloride	ND	2.0	ND	0.58
76-13-1	Trichlorotrifluoroethane	ND	2.0	ND	0.26
75-15-0	Carbon Disulfide	ND	2.0	ND	0.64
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.50
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.55
108-05-4	Vinyl Acetate	ND	2.0	ND	0.57
78-93-3	2-Butanone	ND	2.0	ND	0.68
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50
67-66-3	Chloroform	ND	2.0	ND	0.41
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.37
71-43-2	Benzene	ND	2.0	ND	0.63
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.43

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2

PAI Sample ID : P2000586-008

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/17/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30
79-01-6	Trichloroethene	210	2.0	39	0.37
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.44
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.49
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37
108-88-3	Toluene	3.1	2.0	0.83	0.53
591-78-6	2-Hexanone	ND	2.0	ND	0.49
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26
127-18-4	Tetrachloroethene	5.1	2.0	0.75	0.30
108-90-7	Chlorobenzene	ND	2.0	ND	0.43
100-41-4	Ethylbenzene	ND	2.0	ND	0.46
1330-20-7	m- & p-Xylenes	ND	2.0	ND	0.46
75-25-2	Bromoform	ND	2.0	ND	0.19
100-42-5	Styrene	ND	2.0	ND	0.47
95-47-6	o-Xylene	ND	2.0	ND	0.46
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.29
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.33
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.33
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.33

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : VMP-2**  
**PAI Sample ID : P2000586-009**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/16/00  
Date Received : 3/17/00  
Date Analyzed : 3/17/00  
Volume(s) Analyzed : 0.250 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	4.0	ND	1.9
75-01-4	Vinyl Chloride	ND	4.0	ND	1.6
74-83-9	Bromomethane	ND	4.0	ND	1.0
75-00-3	Chloroethane	ND	4.0	ND	1.5
67-64-1	Acetone	ND	4.0	ND	1.7
75-69-4	Trichlorofluoromethane	ND	4.0	ND	0.71
75-35-4	1,1-Dichloroethene	ND	4.0	ND	1.0
75-09-2	Methylene chloride	ND	4.0	ND	1.2
76-13-1	Trichlorotrifluoroethane	ND	4.0	ND	0.52
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3
156-60-5	trans-1,2-Dichloroethene	ND	4.0	ND	1.0
75-34-3	1,1-Dichloroethane	ND	4.0	ND	0.99
1634-04-4	Methyl tert-Butyl Ether	ND	4.0	ND	1.1
108-05-4	Vinyl Acetate	ND	4.0	ND	1.1
78-93-3	2-Butanone	ND	4.0	ND	1.4
156-59-2	cis-1,2-Dichloroethene	ND	4.0	ND	1.0
67-66-3	Chloroform	ND	4.0	ND	0.82
107-06-2	1,2-Dichloroethane	ND	4.0	ND	0.99
71-55-6	1,1,1-Trichloroethane	ND	4.0	ND	0.73
71-43-2	Benzene	ND	4.0	ND	1.3
56-23-5	Carbon Tetrachloride	ND	4.0	ND	0.64
78-87-5	1,2-Dichloropropane	ND	4.0	ND	0.87

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-2

PAI Sample ID : P2000586-009

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : 3/16/00  
Date Received : 3/17/00  
Date Analyzed : 3/17/00  
Volume(s) Analyzed : 0.250 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	4.0	ND	0.60
79-01-6	Trichloroethene	230	4.0	43	0.74
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	ND	0.88
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	ND	0.88
79-00-5	1,1,2-Trichloroethane	ND	4.0	ND	0.73
108-88-3	Toluene	5.6	4.0	1.5	1.1
591-78-6	2-Hexanone	ND	4.0	ND	0.98
124-48-1	Dibromochloromethane	ND	4.0	ND	0.47
106-93-4	1,2-Dibromoethane	ND	4.0	ND	0.52
127-18-4	Tetrachloroethene	13	4.0	2.0	0.59
108-90-7	Chlorobenzene	ND	4.0	ND	0.87
100-41-4	Ethylbenzene	ND	4.0	ND	0.92
1330-20-7	m- & p-Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	4.0	ND	0.39
100-42-5	Styrene	ND	4.0	ND	0.94
95-47-6	o-Xylene	ND	4.0	ND	0.92
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ND	0.58
541-73-1	1,3-Dichlorobenzene	ND	4.0	ND	0.67
106-46-7	1,4-Dichlorobenzene	ND	4.0	ND	0.67
95-50-1	1,2-Dichlorobenzene	ND	4.0	ND	0.67

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-1

PAI Sample ID : P2000586-010

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	2.0	ND	0.97
75-01-4	Vinyl Chloride	ND	2.0	ND	0.78
74-83-9	Bromomethane	ND	2.0	ND	0.52
75-00-3	Chloroethane	ND	2.0	ND	0.76
67-64-1	Acetone	ND	2.0	ND	0.84
75-69-4	Trichlorofluoromethane	ND	2.0	ND	0.36
75-35-4	1,1-Dichloroethene	2.3	2.0	0.58	0.50
75-09-2	Methylene chloride	ND	2.0	ND	0.58
76-13-1	Trichlorotrifluoroethane	ND	2.0	ND	0.26
75-15-0	Carbon Disulfide	ND	2.0	ND	0.64
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.50
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.55
108-05-4	Vinyl Acetate	ND	2.0	ND	0.57
78-93-3	2-Butanone	ND	2.0	ND	0.68
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50
67-66-3	Chloroform	ND	2.0	ND	0.41
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.37
71-43-2	Benzene	ND	2.0	ND	0.63
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.43

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-1

PAI Sample ID : P2000586-010

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30
79-01-6	Trichloroethene	160	2.0	29	0.37
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.44
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.49
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37
108-88-3	Toluene	ND	2.0	ND	0.53
591-78-6	2-Hexanone	ND	2.0	ND	0.49
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26
127-18-4	Tetrachloroethene	6.8	2.0	1.0	0.30
108-90-7	Chlorobenzene	ND	2.0	ND	0.43
100-41-4	Ethylbenzene	ND	2.0	ND	0.46
1330-20-7	m- & p-Xylenes	ND	2.0	ND	0.46
75-25-2	Bromoform	ND	2.0	ND	0.19
100-42-5	Styrene	ND	2.0	ND	0.47
95-47-6	o-Xylene	ND	2.0	ND	0.46
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.29
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.33
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.33
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.33

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Blower Influent

PAI Sample ID : P2000586-011

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.020 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	50	ND	24
75-01-4	Vinyl Chloride	ND	50	ND	20
74-83-9	Bromomethane	ND	50	ND	13
75-00-3	Chloroethane	ND	50	ND	19
67-64-1	Acetone	ND	50	ND	21
75-69-4	Trichlorofluoromethane	ND	50	ND	8.9
75-35-4	1,1-Dichloroethene	33 TR	50	8.2 TR	13
75-09-2	Methylene chloride	ND	50	ND	14
76-13-1	Trichlorotrifluoroethane	ND	50	ND	6.5
75-15-0	Carbon Disulfide	ND	50	ND	16
156-60-5	trans-1,2-Dichloroethene	ND	50	ND	13
75-34-3	1,1-Dichloroethane	ND	50	ND	12
1634-04-4	Methyl tert-Butyl Ether	ND	50	ND	14
108-05-4	Vinyl Acetate	ND	50	ND	14
78-93-3	2-Butanone	ND	50	ND	17
156-59-2	cis-1,2-Dichloroethene	ND	50	ND	13
67-66-3	Chloroform	ND	50	ND	10
107-06-2	1,2-Dichloroethane	ND	50	ND	12
71-55-6	1,1,1-Trichloroethane	ND	50	ND	9.2
71-43-2	Benzene	ND	50	ND	16
56-23-5	Carbon Tetrachloride	ND	50	ND	8.0
78-87-5	1,2-Dichloropropane	ND	50	ND	11

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/27/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Blower Influent

PAI Sample ID : P2000586-011

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.020 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	50	ND	7.5
79-01-6	Trichloroethene	4,600	50	860	9.3
10061-01-5	cis-1,3-Dichloropropene	ND	50	ND	11
108-10-1	4-Methyl-2-pentanone	ND	50	ND	12
10061-02-6	trans-1,3-Dichloropropene	ND	50	ND	11
79-00-5	1,1,2-Trichloroethane	ND	50	ND	9.2
108-88-3	Toluene	180	50	49	13
591-78-6	2-Hexanone	ND	50	ND	12
124-48-1	Dibromochloromethane	ND	50	ND	5.9
106-93-4	1,2-Dibromoethane	ND	50	ND	6.5
127-18-4	Tetrachloroethene	130	50	19	7.4
108-90-7	Chlorobenzene	ND	50	ND	11
100-41-4	Ethylbenzene	ND	50	ND	12
1330-20-7	m- & p-Xylenes	ND	50	ND	12
75-25-2	Bromoform	ND	50	ND	4.8
100-42-5	Styrene	ND	50	ND	12
95-47-6	o-Xylene	ND	50	ND	12
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	ND	7.3
541-73-1	1,3-Dichlorobenzene	ND	50	ND	8.3
106-46-7	1,4-Dichlorobenzene	ND	50	ND	8.3
95-50-1	1,2-Dichlorobenzene	ND	50	ND	8.3

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/27/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Primary Influent**

**PAI Sample ID : P2000586-012**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 1.00 ml  
0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	0.76 TR	1.0	0.19 TR	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Primary Influent

PAI Sample ID : P2000586-012

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 1.00 ml  
0.500 ml

D.F. = 1.00

CAS #	COMPOUND	RESULT mg/m <sup>3</sup>	REPORTING LIMIT mg/m <sup>3</sup>	RESULT ppm	REPORTING LIMIT ppm
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	97	1.0	18	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	5.3	1.0	1.4	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	3.1	1.0	0.46	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Secondary Effluent

PAI Sample ID : P2000586-013

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.200 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	ND	5.0	ND	2.4
75-01-4	Vinyl Chloride	ND	5.0	ND	2.0
74-83-9	Bromomethane	ND	5.0	ND	1.3
75-00-3	Chloroethane	ND	5.0	ND	1.9
67-64-1	Acetone	9.4	5.0	3.9	2.1
75-69-4	Trichlorofluoromethane	ND	5.0	ND	0.89
75-35-4	1,1-Dichloroethene	ND	5.0	ND	1.3
75-09-2	Methylene chloride	ND	5.0	ND	1.4
76-13-1	Trichlorotrifluoroethane	ND	5.0	ND	0.65
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ND	1.3
75-34-3	1,1-Dichloroethane	ND	5.0	ND	1.2
1634-04-4	Methyl tert-Butyl Ether	ND	5.0	ND	1.4
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4
78-93-3	2-Butanone	ND	5.0	ND	1.7
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ND	1.3
67-66-3	Chloroform	ND	5.0	ND	1.0
107-06-2	1,2-Dichloroethane	ND	5.0	ND	1.2
71-55-6	1,1,1-Trichloroethane	ND	5.0	ND	0.92
71-43-2	Benzene	ND	5.0	ND	1.6
56-23-5	Carbon Tetrachloride	ND	5.0	ND	0.80
78-87-5	1,2-Dichloropropane	ND	5.0	ND	1.1

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Secondary Effluent

PAI Sample ID : P2000586-013

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.200 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	5.0	ND	0.75
79-01-6	Trichloroethene	ND	5.0	ND	0.93
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ND	1.1
108-10-1	4-Methyl-2-pentanone	ND	5.0	ND	1.2
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ND	1.1
79-00-5	1,1,2-Trichloroethane	ND	5.0	ND	0.92
108-88-3	Toluene	3.6 TR	5.0	0.94 TR	1.3
591-78-6	2-Hexanone	ND	5.0	ND	1.2
124-48-1	Dibromochloromethane	ND	5.0	ND	0.59
106-93-4	1,2-Dibromoethane	ND	5.0	ND	0.65
127-18-4	Tetrachloroethene	ND	5.0	ND	0.74
108-90-7	Chlorobenzene	ND	5.0	ND	1.1
100-41-4	Ethylbenzene	ND	5.0	ND	1.2
1330-20-7	m- & p-Xylenes	ND	5.0	ND	1.2
75-25-2	Bromoform	ND	5.0	ND	0.48
100-42-5	Styrene	ND	5.0	ND	1.2
95-47-6	o-Xylene	ND	5.0	ND	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
541-73-1	1,3-Dichlorobenzene	ND	5.0	ND	0.83
106-46-7	1,4-Dichlorobenzene	ND	5.0	ND	0.83
95-50-1	1,2-Dichlorobenzene	ND	5.0	ND	0.83

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory

A Division of Columbia Analytical Services, Inc.

An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Secondary Effluent

PAI Sample ID : P2000586-013DUP

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.200 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	5.0	ND	0.75
79-01-6	Trichloroethene	ND	5.0	ND	0.93
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ND	1.1
108-10-1	4-Methyl-2-pentanone	ND	5.0	ND	1.2
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ND	1.1
79-00-5	1,1,2-Trichloroethane	ND	5.0	ND	0.92
108-88-3	Toluene	3.7 TR	5.0	0.97 TR	1.3
591-78-6	2-Hexanone	ND	5.0	ND	1.2
124-48-1	Dibromochloromethane	ND	5.0	ND	0.59
106-93-4	1,2-Dibromoethane	ND	5.0	ND	0.65
127-18-4	Tetrachloroethene	ND	5.0	ND	0.74
108-90-7	Chlorobenzene	ND	5.0	ND	1.1
100-41-4	Ethylbenzene	ND	5.0	ND	1.2
1330-20-7	m- & p-Xylenes	ND	5.0	ND	1.2
75-25-2	Bromoform	ND	5.0	ND	0.48
100-42-5	Styrene	ND	5.0	ND	1.2
95-47-6	o-Xylene	ND	5.0	ND	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
541-73-1	1,3-Dichlorobenzene	ND	5.0	ND	0.83
106-46-7	1,4-Dichlorobenzene	ND	5.0	ND	0.83
95-50-1	1,2-Dichlorobenzene	ND	5.0	ND	0.83

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Secondary Effluent**

**PAI Sample ID : P2000586-013DUP**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : 3/16/00

Date Received : 3/17/00

Date Analyzed : 3/18/00

Volume(s) Analyzed : 0.200 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	ND	5.0	ND	2.4
75-01-4	Vinyl Chloride	ND	5.0	ND	2.0
74-83-9	Bromomethane	ND	5.0	ND	1.3
75-00-3	Chloroethane	ND	5.0	ND	1.9
67-64-1	Acetone	9.4	5.0	3.9	2.1
75-69-4	Trichlorofluoromethane	ND	5.0	ND	0.89
75-35-4	1,1-Dichloroethene	ND	5.0	ND	1.3
75-09-2	Methylene chloride	ND	5.0	ND	1.4
76-13-1	Trichlorotrifluoroethane	ND	5.0	ND	0.65
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ND	1.3
75-34-3	1,1-Dichloroethane	ND	5.0	ND	1.2
1634-04-4	Methyl tert-Butyl Ether	ND	5.0	ND	1.4
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4
78-93-3	2-Butanone	ND	5.0	ND	1.7
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ND	1.3
67-66-3	Chloroform	ND	5.0	ND	1.0
107-06-2	1,2-Dichloroethane	ND	5.0	ND	1.2
71-55-6	1,1,1-Trichloroethane	ND	5.0	ND	0.92
71-43-2	Benzene	ND	5.0	ND	1.6
56-23-5	Carbon Tetrachloride	ND	5.0	ND	0.80
78-87-5	1,2-Dichloropropane	ND	5.0	ND	1.1

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Method Blank**

**PAI Sample ID : P000317-MB**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : N/A

Date Received : N/A

Date Analyzed : 3/17/00

Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory

A Division of Columbia Analytical Services, Inc.

An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Method Blank

PAI Sample ID : P000317-MB

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : N/A

Date Received : N/A

Date Analyzed : 3/17/00

Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Method Blank**

**PAI Sample ID : P000318-MB**

Test Code : GC/MS Mod. EPA TO-14A

Analyst : Chris Parnell/Wade Henton

Instrument : HP5973/Tekmar AUTOCAN Elite

Matrix : Tedlar Bag

Date Sampled : N/A

Date Received : N/A

Date Analyzed : 3/18/00

Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG

Date: 3/30/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

**Client : Erler & Kalinowski, Inc.**

**Client Sample ID : Method Blank**

**PAI Sample ID : P000318-MB**

Test Code : GC/MS Mod. EPA TO-14A  
Analyst : Chris Parnell/Wade Henton  
Instrument : HP5973/Tekmar AUTOCAN Elite  
Matrix : Tedlar Bag

Date Sampled : N/A  
Date Received : N/A  
Date Analyzed : 3/18/00  
Volume(s) Analyzed : 1.00 Liter

D.F. = 1.00

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{m}^3$	REPORTING LIMIT $\mu\text{g}/\text{m}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG Date: 3/30/00

P2000586

1 of 2

## CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler &amp; Kallniowski, Inc.

Analytical Laboratory: PERFORMANCE

Project Number: 961025.03

Date Sampled: 3/16/00

Project Name: WEBB

Sampled By: BJA

Source of Samples: WEBB

Report Results To: BRIAN AUCHARO

Location: 5030 FIRESTONE BLVD, SOUTH GATE, CA

Phone Number: (310) 314-8855

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
-1	SVE-D1	VAPOR	1X5-L TEDLAR	8:57	TO-14	2-weeks
-2	SVE-1			9:25		
-3	EQUIPMENT BLANK			9:45		
-4	SVE-3			9:57		
-5	SVE-2			10:10		
-6	SVE-2-DUP			10:14		
-7	VMP-D1			10:32		
-8	VMP-D2			10:50		
-9	VMP-2			11:10		
-10	VMP-1			11:35		

Special Instructions:

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
BRIAN AUCHARO / <i>[Signature]</i> / EKI	3/17/00	08:00	ABBA S. SHEIKHI	3/17/00	09:31
			<i>[Signature]</i>		

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22000580

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erlor & Kallinowski, Inc.

Analytical Laboratory: PERFORMANCE

Project Number: 961025.03

Date Sampled: 3/16/00

Project Name: WEBB

Sampled By: BJA

Source of Samples: WEBB

Report Results To: BRIAN AUCHARD

Location: 5030 FIRESTONE BLVD, SOUTH GATE

Phone Number: (310) 314-8855

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
-11	BLOWER INFLUENT	VAPOR	1X5-L TEDLAR	16:45	TO-14	1-WEEK
-12	PRIMARY INFLUENT	↓	↓	16:52	↓	2-WEEKS
-13	SECONDARY EFFLUENT	↓	↓	16:57	↓	1

Special Instructions:

Relinquished By:			Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature / Affiliation	Date	Time
BRIAN AUCHARD / <i>[Signature]</i>	3/17/00	08:00	ABRIS SHELKHT	3/16/00	09:31